

127

**Field Test in Santa Cruz
Volume 2
Figures**

Oslo Salomonson

SSAB

A-7/5.7-

FIELD TEST OF THE LINS METHOD FOR THE RECOVERY OF OIL FROM TAR SAND

Volume 2

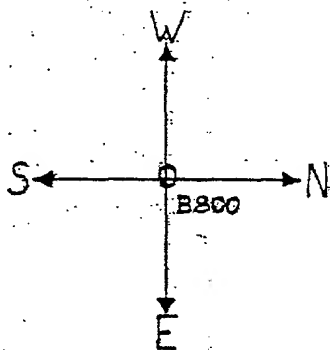
Figures

SANTA CRUZ, CALIFORNIA

Figure 1

LO-213
DEC. 20. 1957. 89

TAR CONTENTS.



HOLE POSITION IN FT FROM B800 IN L8.
SCALE: 1" = 50'

TAR CONTENTS IN % BY WEIGHT OF DRY
TARSAND FROM 10-15 FT, 15-40 FT AND
40-45 FT, WRITTEN ABOVE THE HOLE
POSITION.

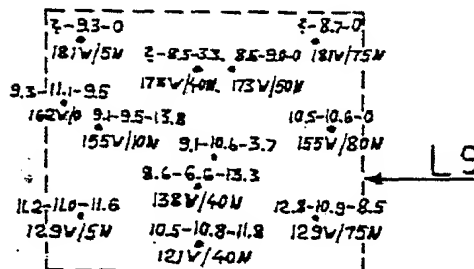
2.4-5.0-7.4
300W/200N

12.1-6.4-7.2
262W/0

9.6-7.4-12.3
190W/50S

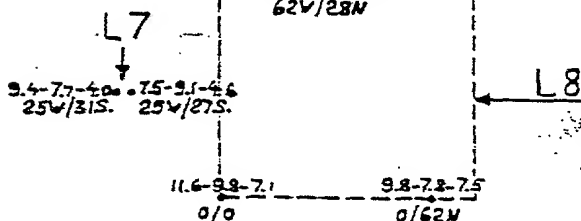
5.0-8.5-2
200W/200N

11.3-10.1-12.5
130W/55S



7.4-9.9-0
100W/200N

L6
12.6-8.3-6.6
14W/95S

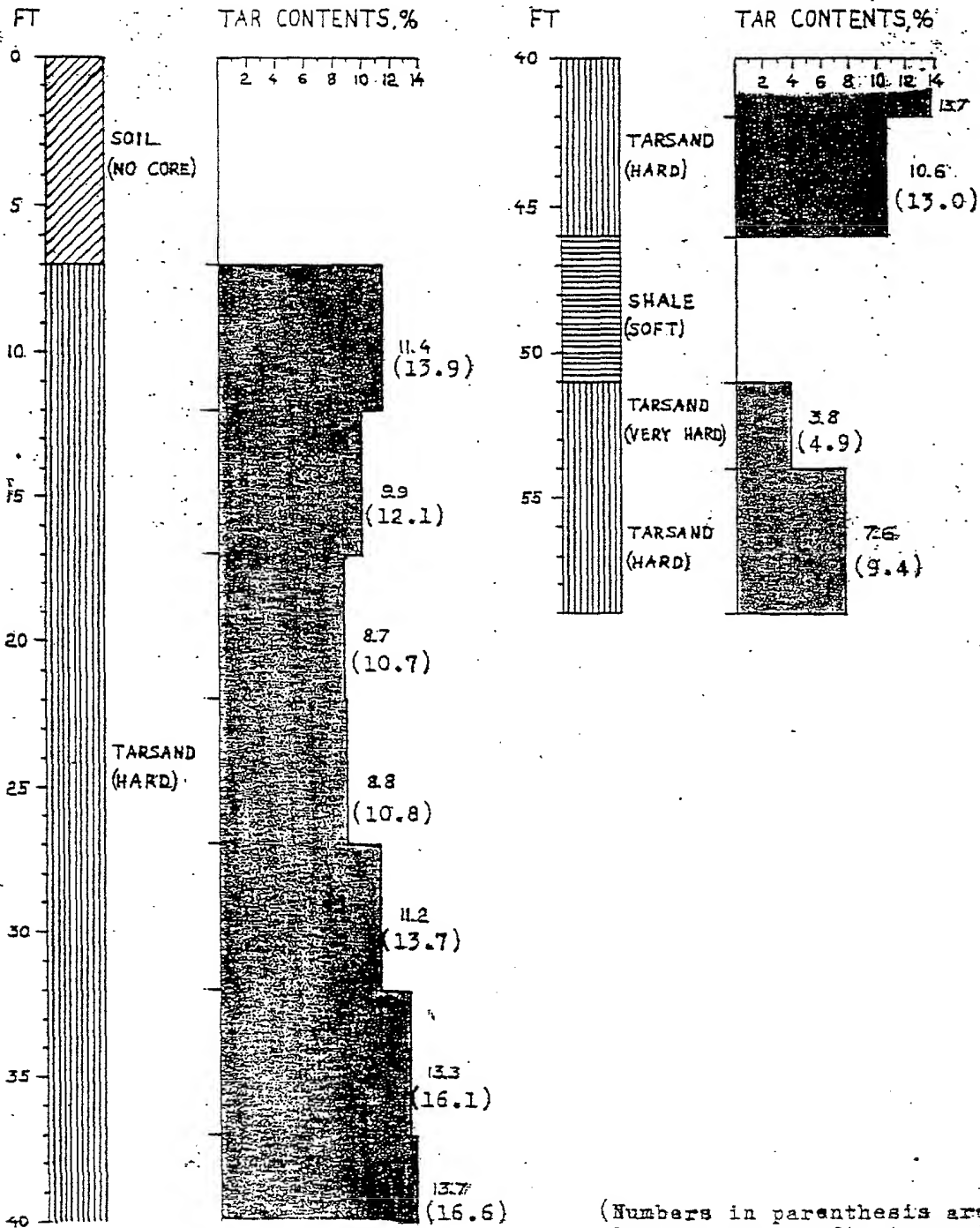


2-7.6-2.6
0/200N

Figure 2

L 9-200
AUG. 30. 1957. 88

WELL LOG 121 W/40 N. (B2-5)

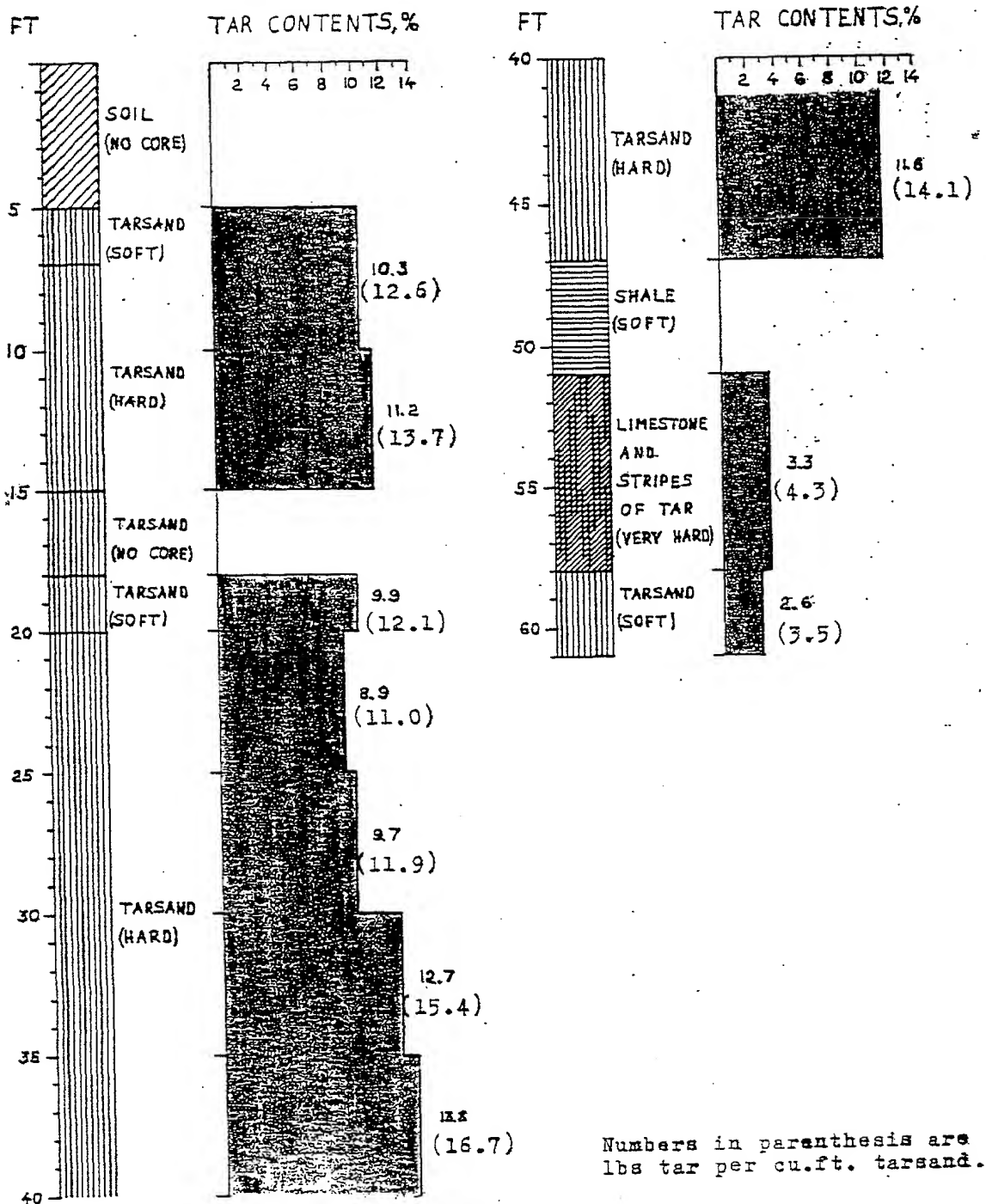


(Numbers in parenthesis are
lbs tar per cu.ft. tarsand.)

L9-201
AUG. 30. 1957. 88

Figure 3

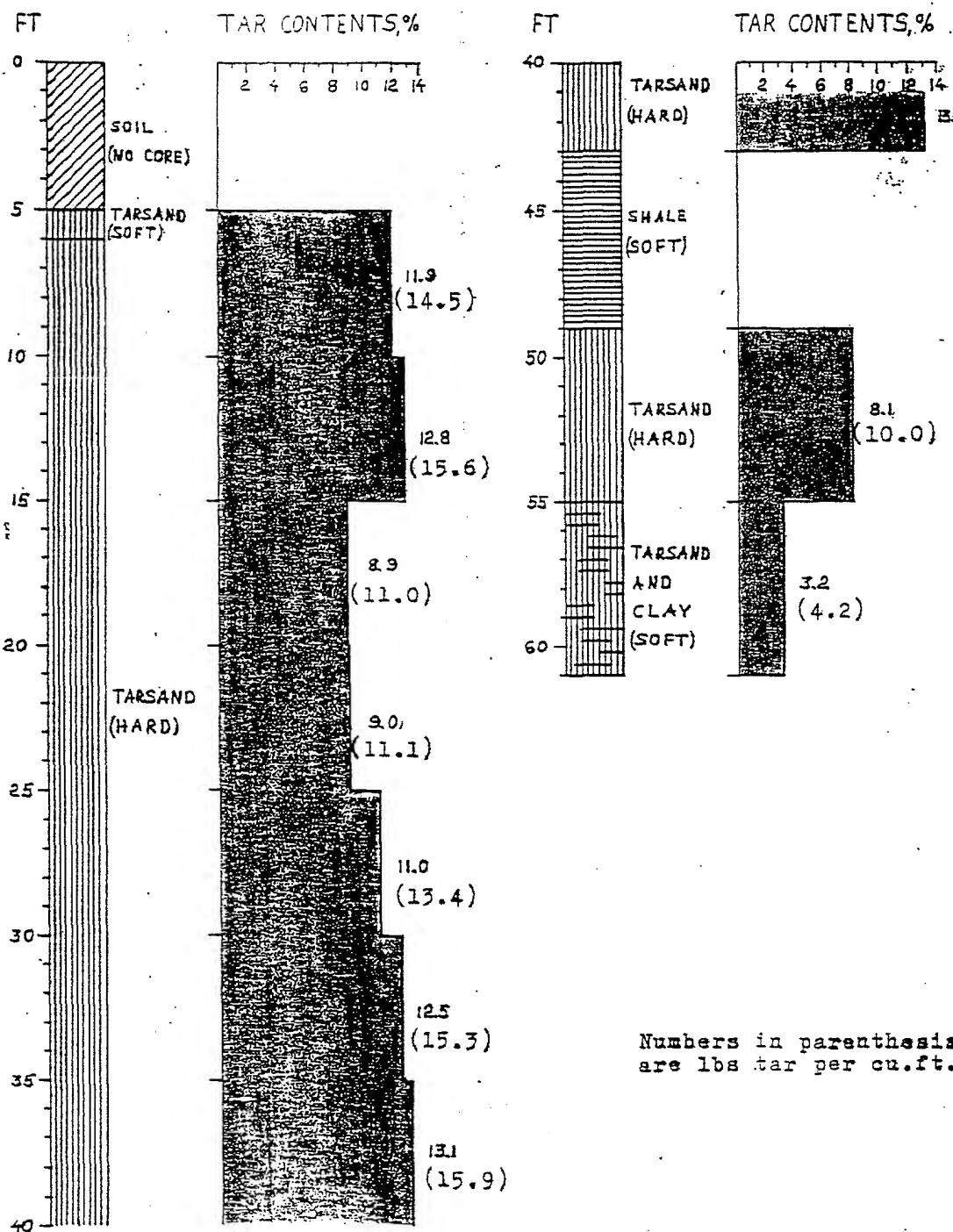
WELL LOG
129 W/5 N. (B3-2)



L9-202.
AUG.30.1957. 89.

Figure 4

WELL LOG 129 W/75 N. (B3-9)

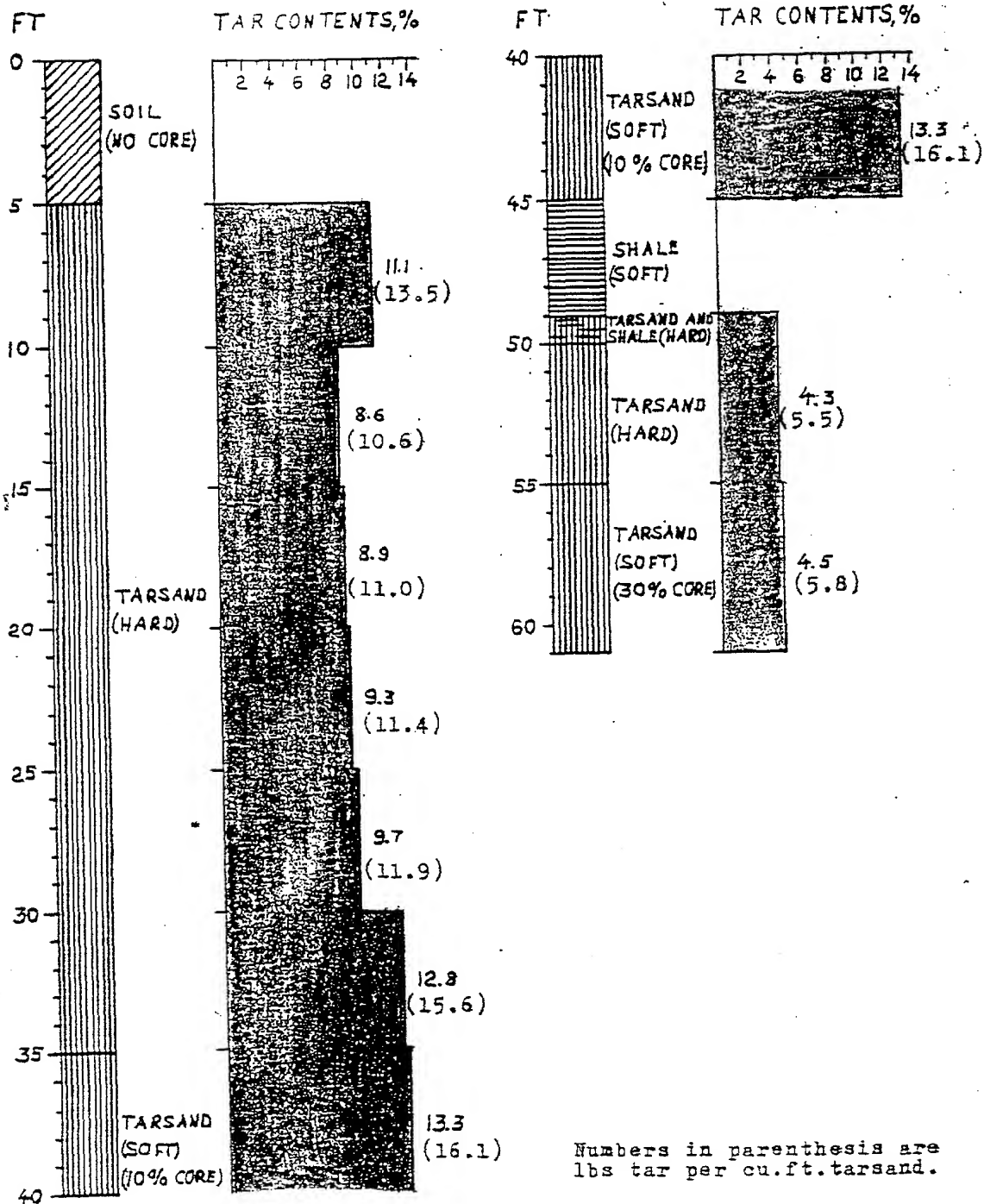


Numbers in parenthesis
are lbs tar per cu.ft.tarsand.

L9-203.
AUG.30.1957.89

Figure 5

WELL LOG 138 W/40 N. (B4-5)

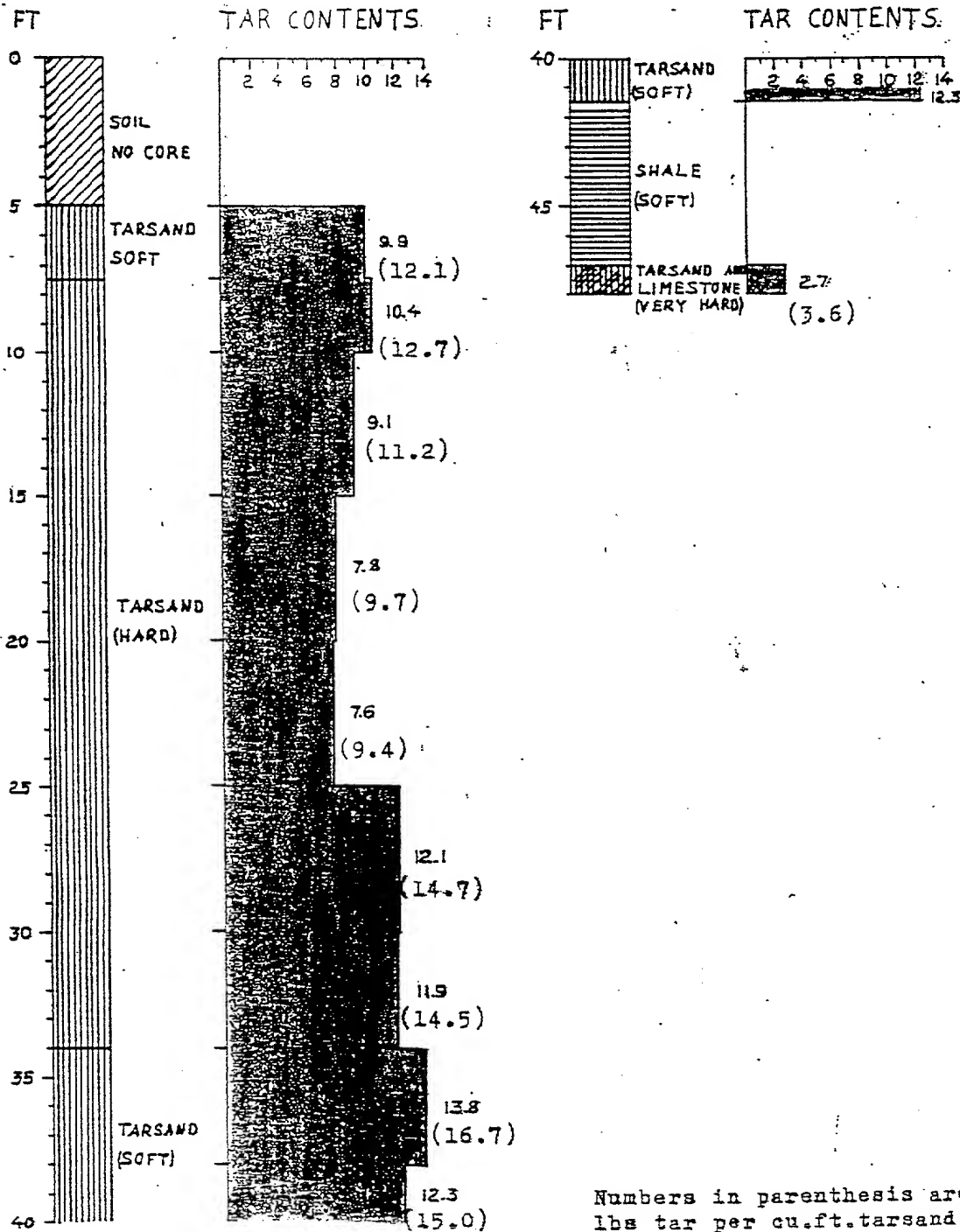


Numbers in parenthesis are
lbs tar per cu.ft.tarsand.

Figure 6

L9-212
OCT. 18. 1957. 88.

WELL LOG
147 W/45 N. (B5-6)



Numbers in parenthesis are
lbs tar per cu.ft. tarsand.

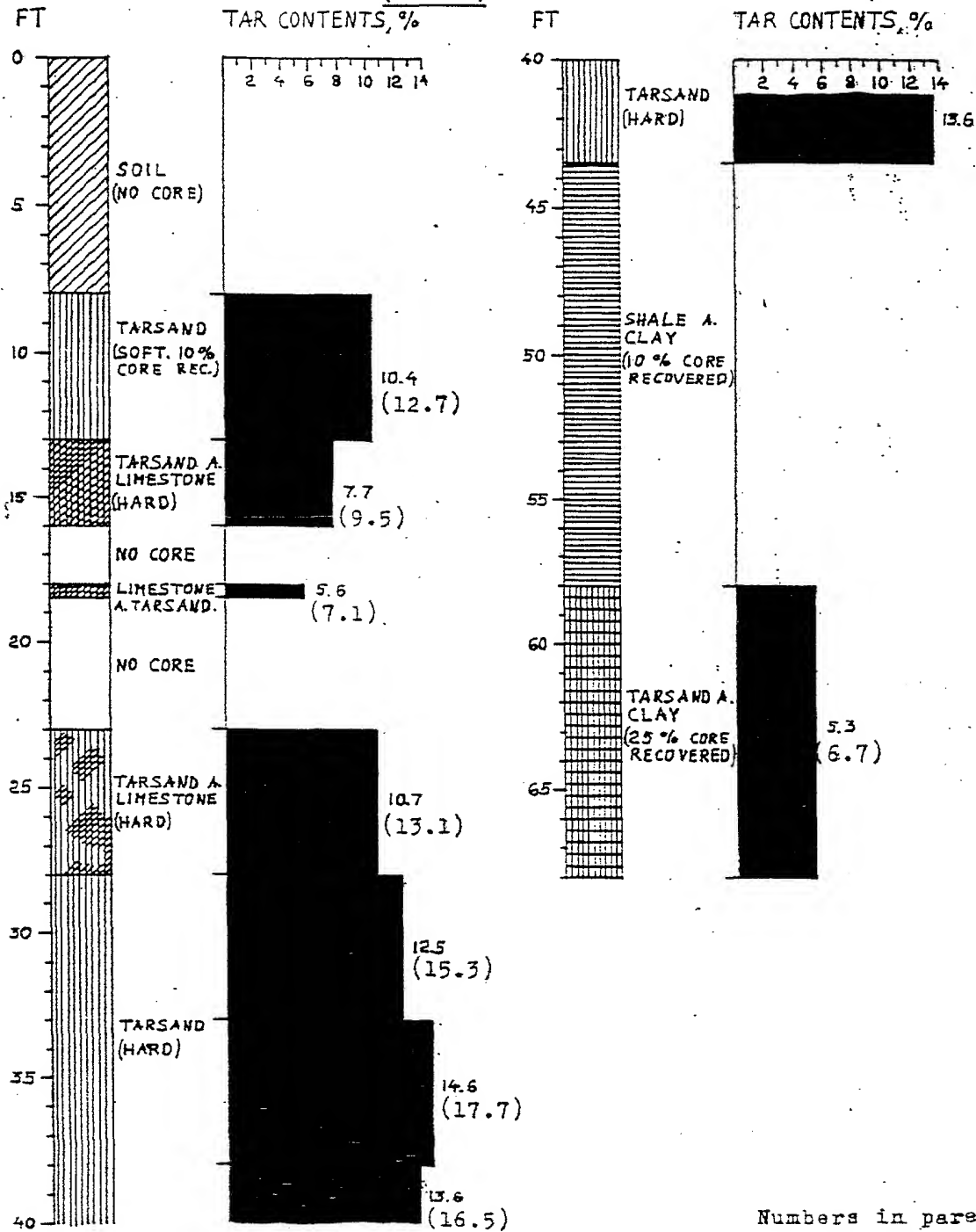
Figure 7

L9-204
1957.MAY 2. 830

WELL LOG.

162W/O.

(T61)

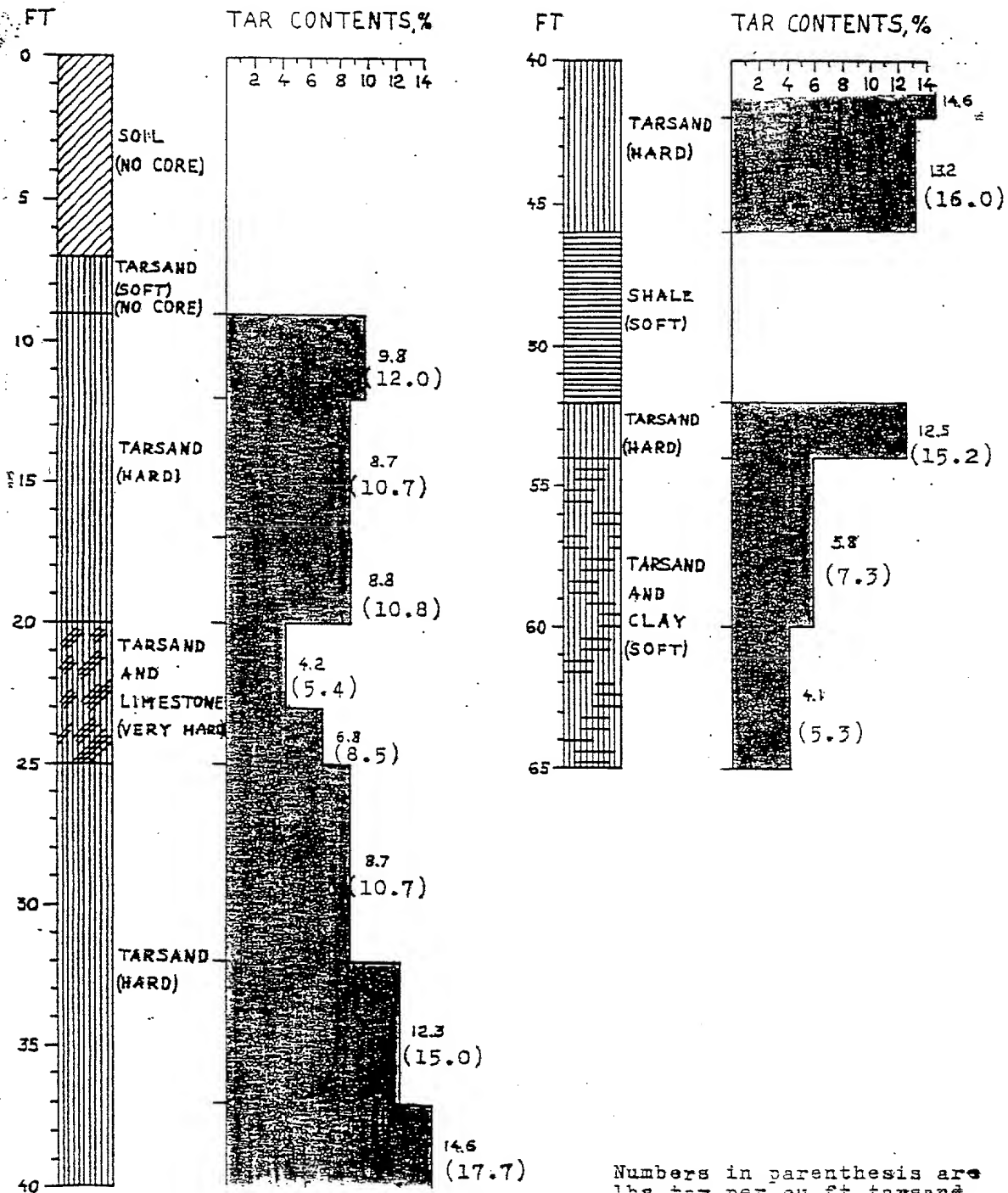


Numbers in parenthesis are lbs tar per cu.ft. tarsand.

Figure 8

L9-205
OCT. 18. 1957. 89

WELL LOG 155 W/10 N. (B6-2.)

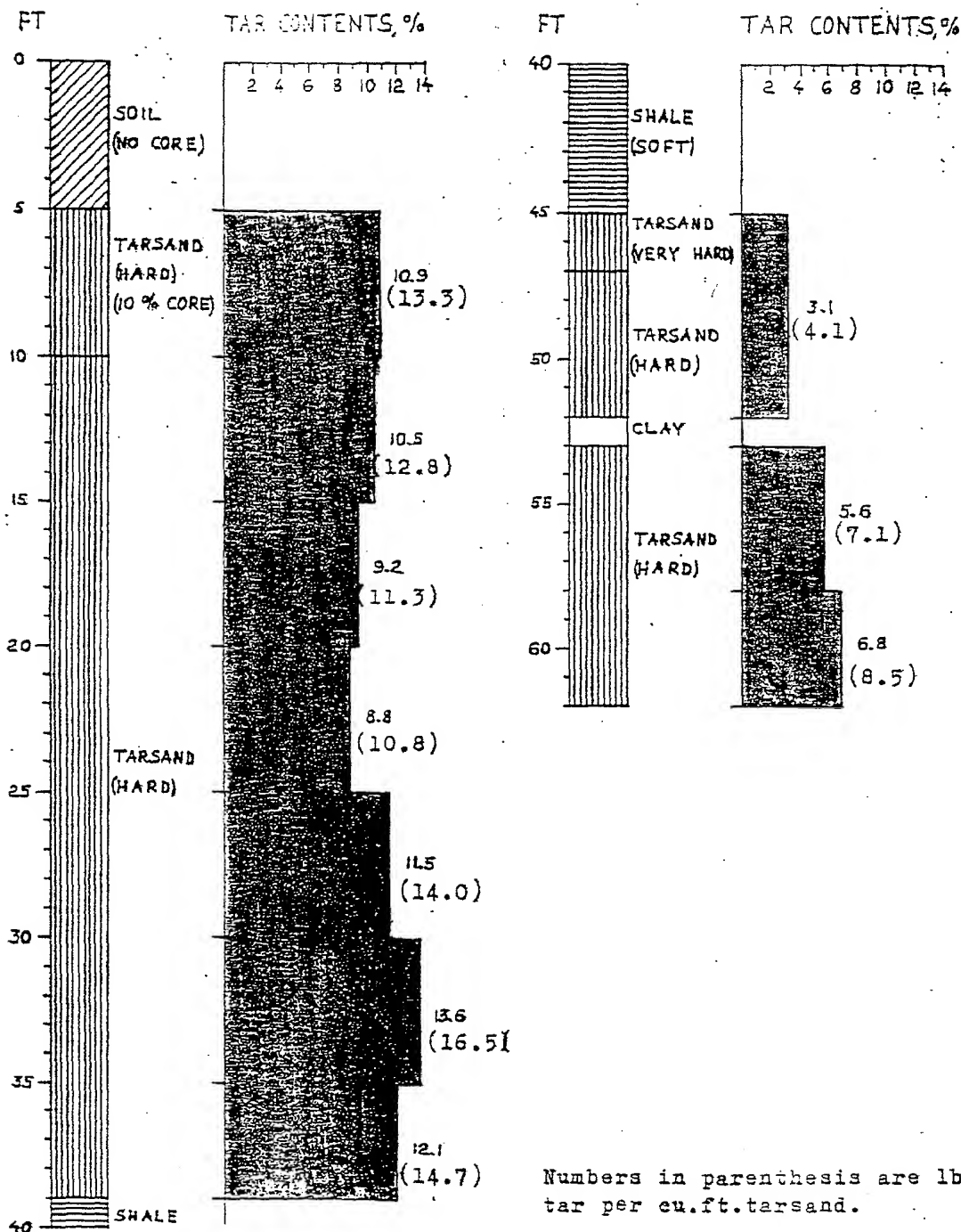


Numbers in parenthesis are
lbs tar per cu.ft. tarsand.

Figure 9

L9-206.
AUG. 30. 1957. 22

WELL LOG.
155 W/80 N. (B6-9)

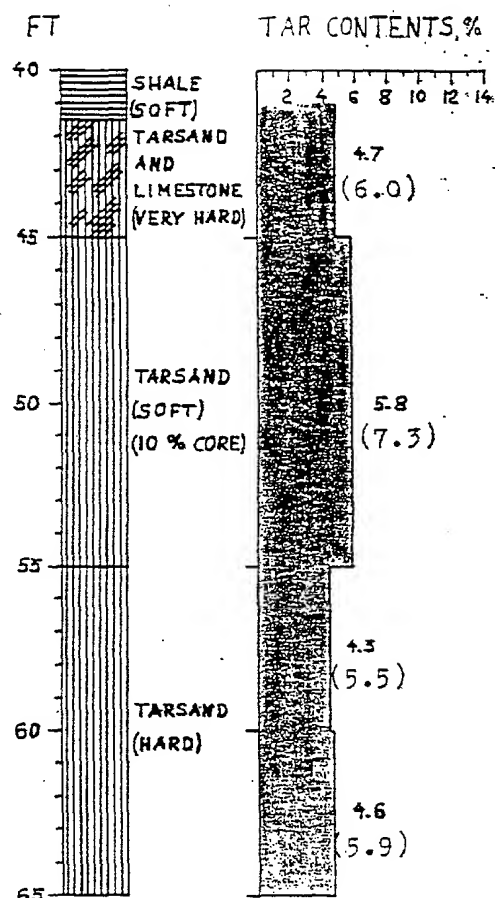
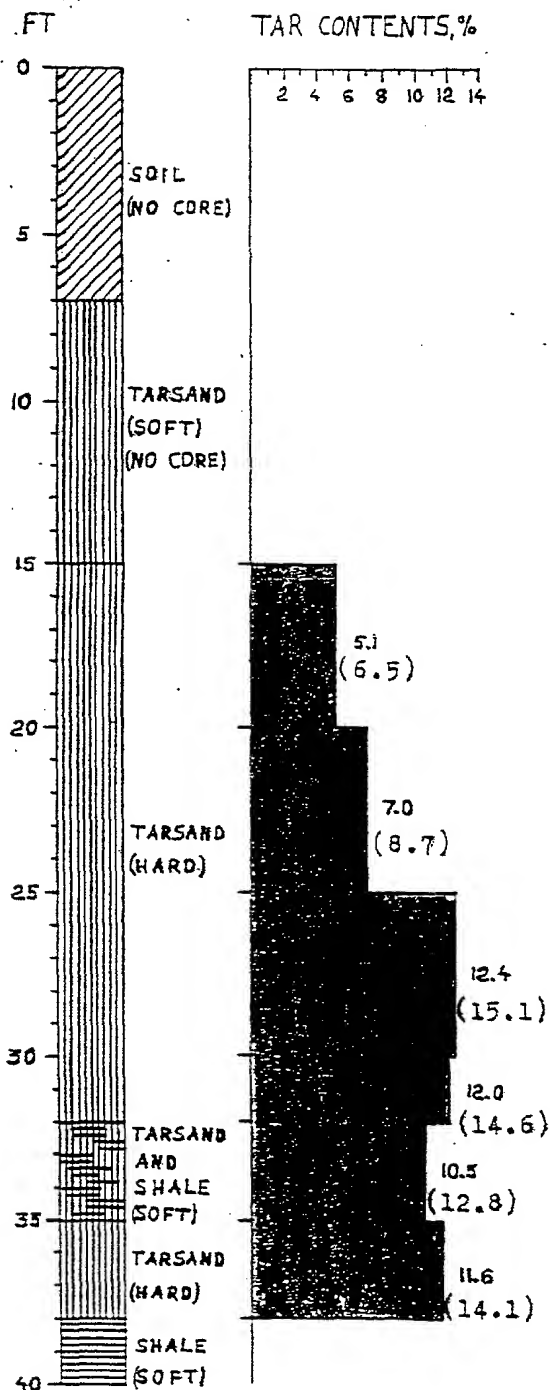


Numbers in parenthesis are lbs tar per cu.ft. tarsand.

Figure 10

L9-207.
AUG.30.1957.28

WELL LOG.
173 W/40 N. (B8-5)

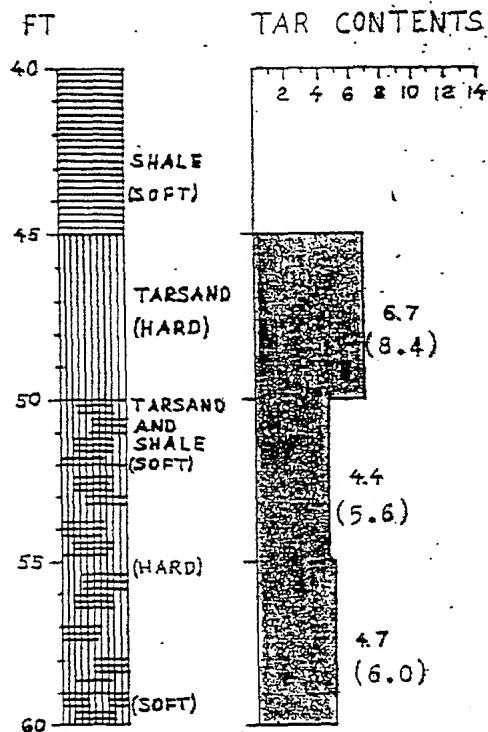
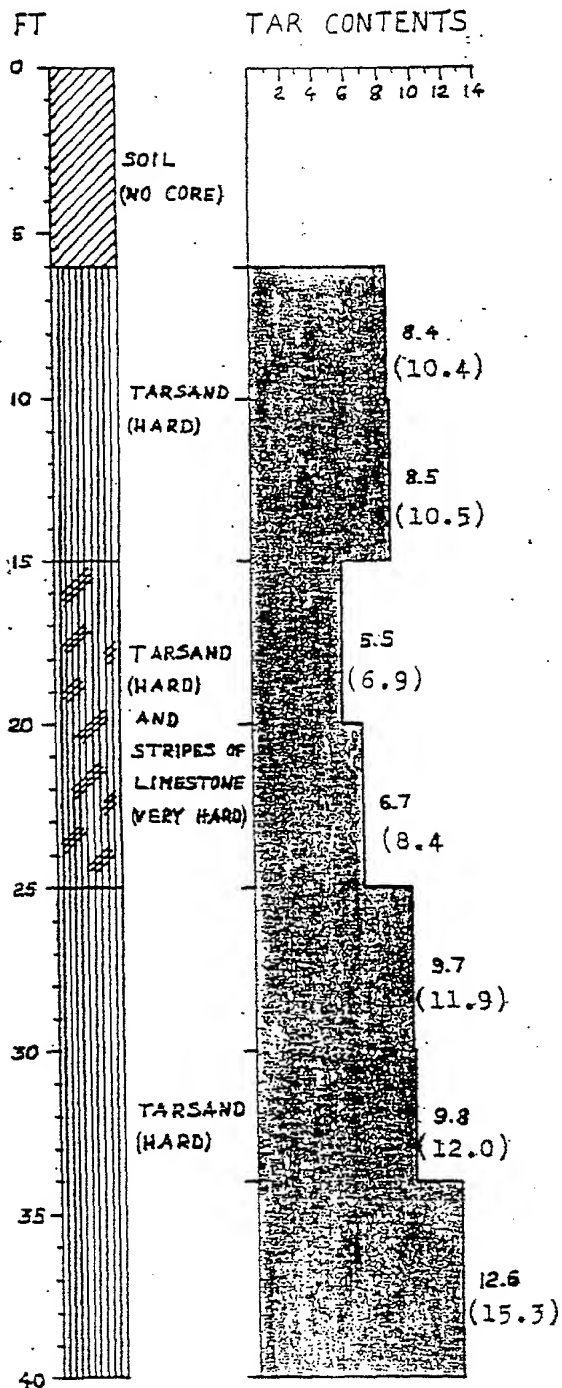


Numbers in parenthesis are lbs tar per cu.ft. tarsand.

Figure 11

L9-211.
OCT. 18. 1957. 22.

WELL LOG.
173 W/50 N. (B8-6)

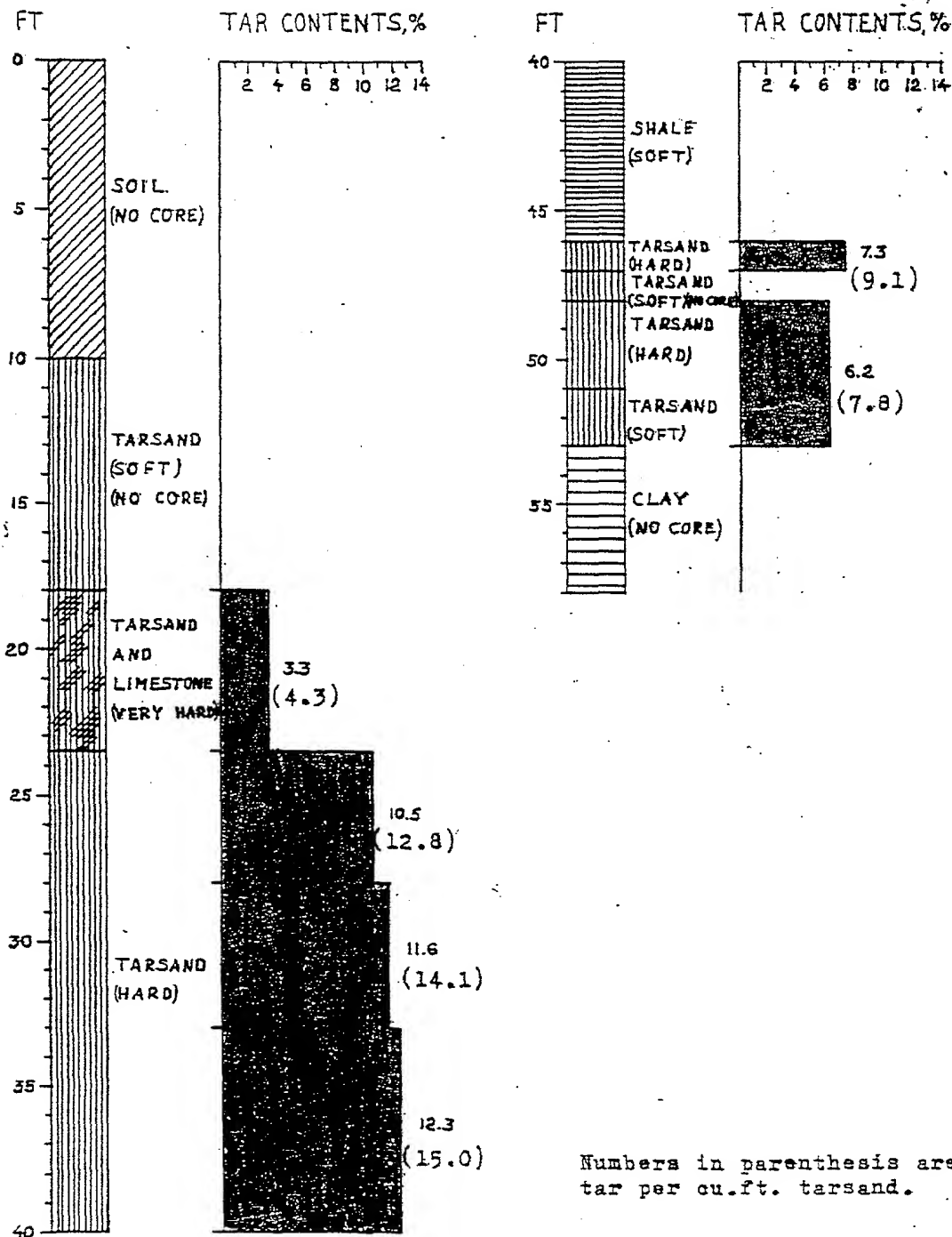


Numbers in parenthesis are lbs tar per cu.ft. tarsand.

Figure 12

L9-208.
OCT. 18, 1957. 88

WELL LOG.
181 W/5 N. (B9-2)

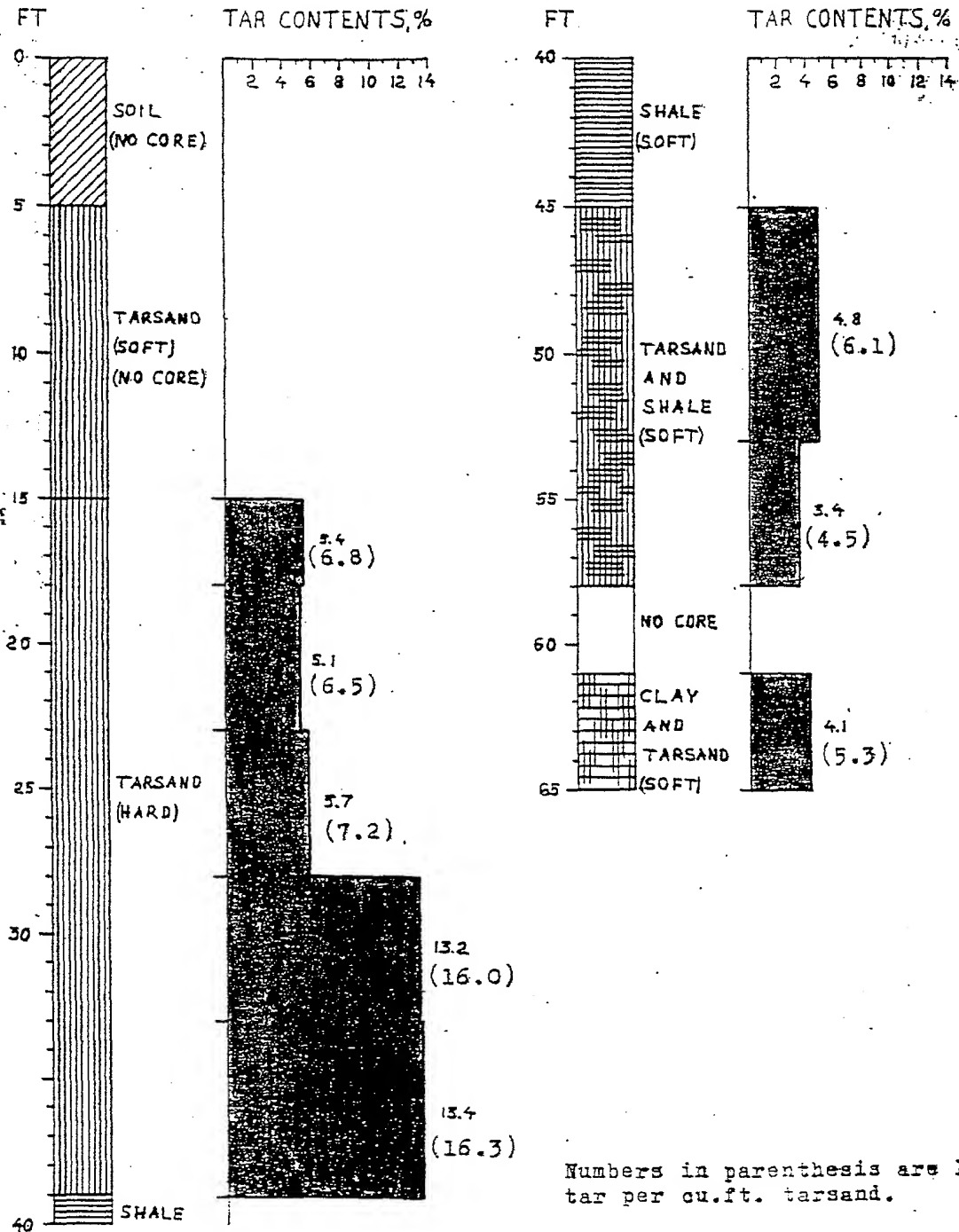


Numbers in parenthesis are lbs tar per cu.ft. tarsand.

Figure 13

L9-209
OCT. 18. 1957. 28

WELL LOG
181 W/75 N. (B9-9)



Numbers in parenthesis are lbs tar per cu.ft. tarsand.

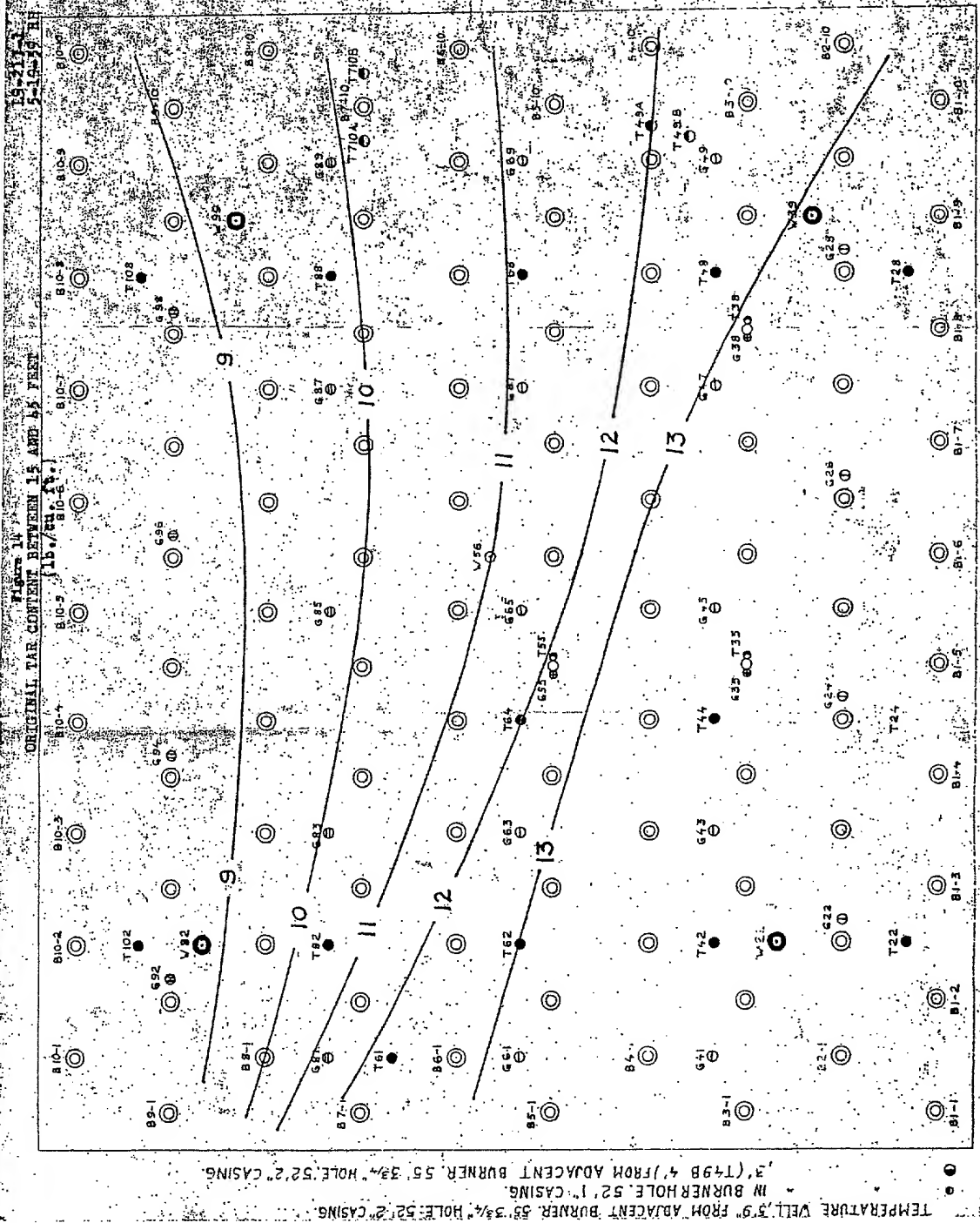
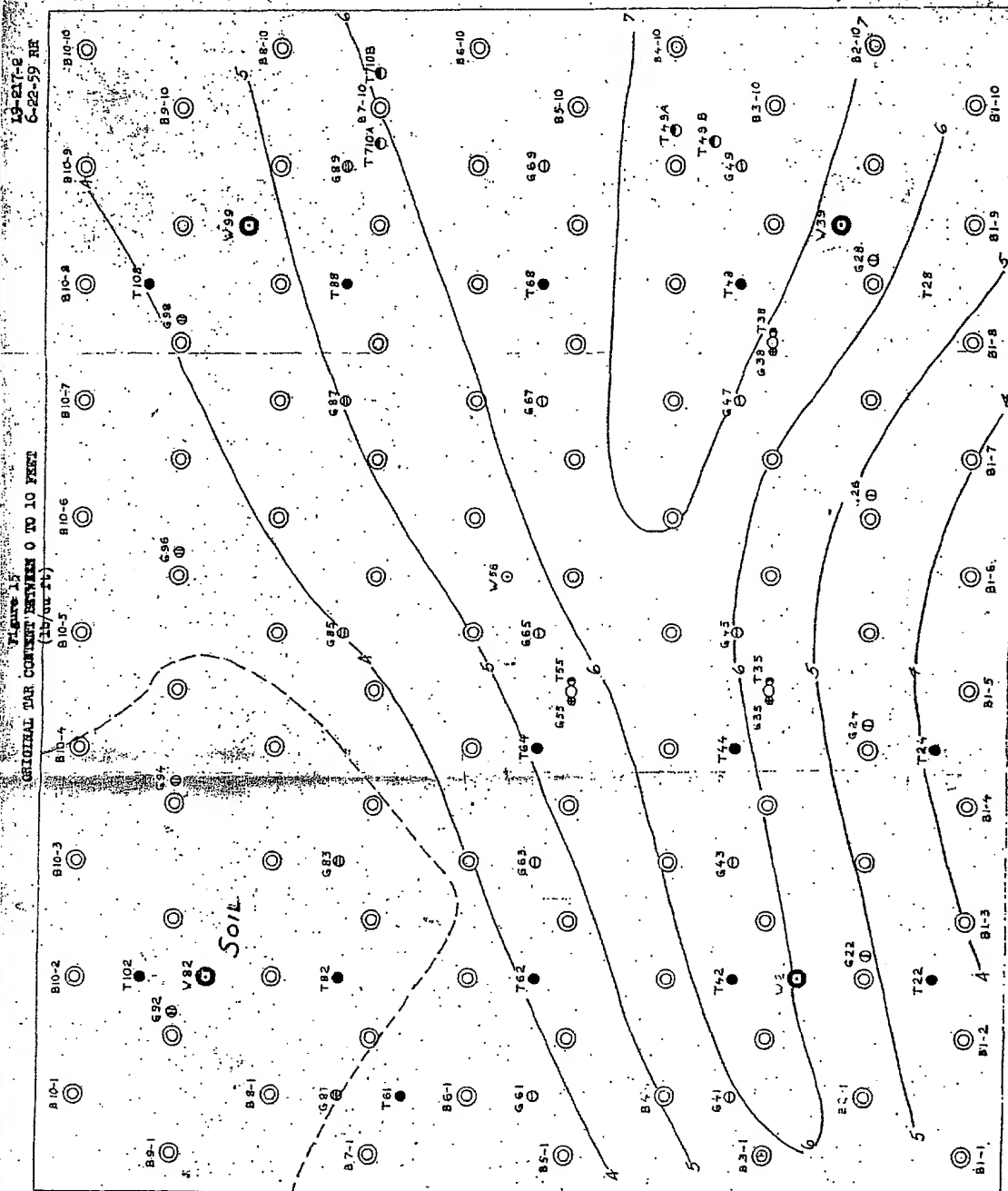


FIGURE 14
ORIGINAL TAR CONTENT BETWEEN 15 AND 16 FEET

15-21-53
5-10-53

TEMPERATURE WELL 5.9" FROM ADJACENT BURNER 55 3/4" HOLE 52.2" CASING
IN BURNER HOLE 52.1" CASING
'3' (T49B 4') FROM ADJACENT BURNER 55 3/4" HOLE 52.2" CASING



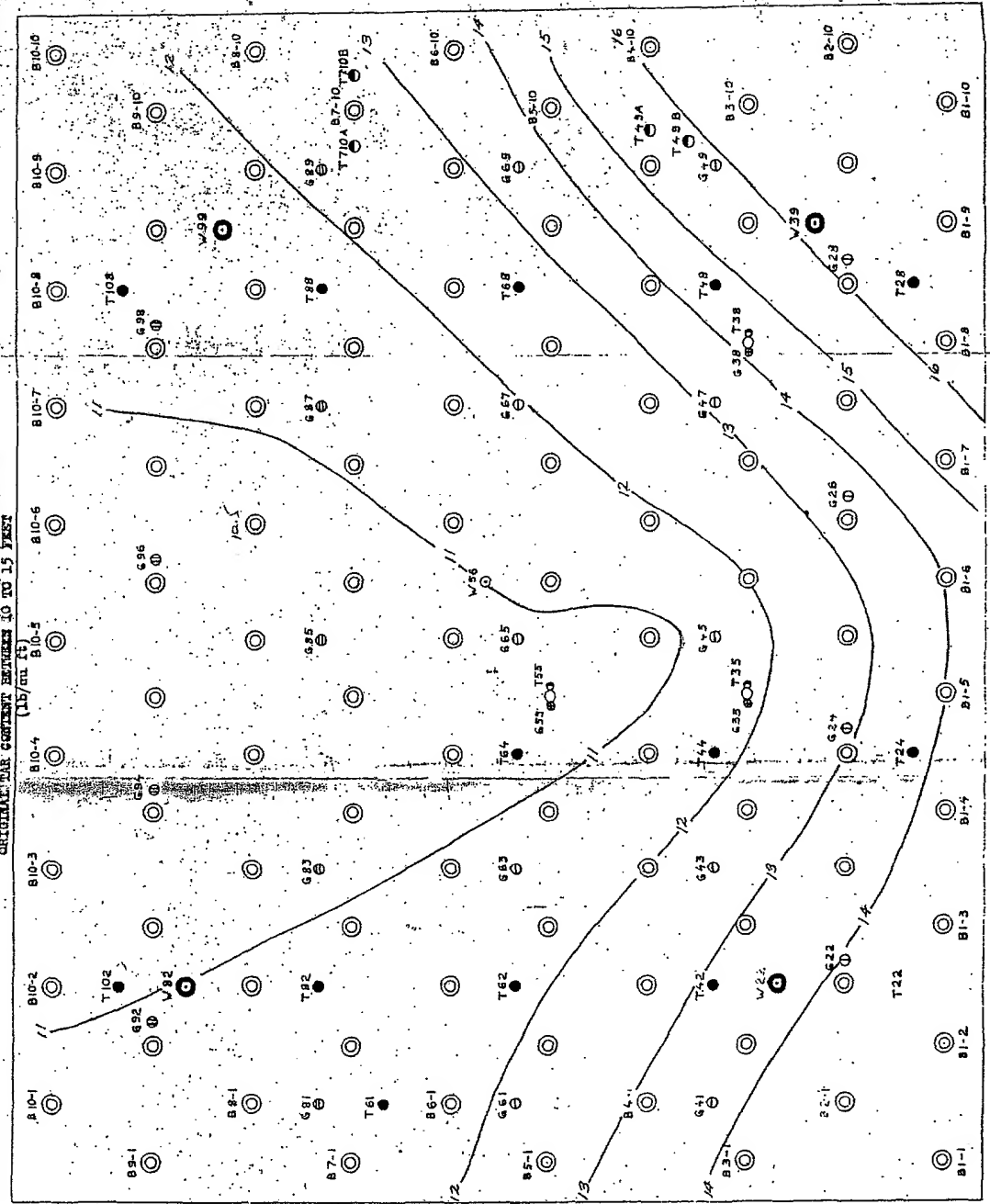
13-217-2
6-22-59 RR

Figure 15
ORIGINAL TAR CONTENT BETWEEN 0 TO 10 FEET
(in wt %)

● TEMPERATURE WELL, 5.9" FROM ADJACENT BURNER, 55.3% HOLE, 52.2" CASING.
○ IN BURNER HOLE, 52.1" CASING.
○ 3" (T49B 4") FROM ADJACENT BURNER, 55.3% HOLE, 52.2" CASING.

15-17-53
6-22-59 RH

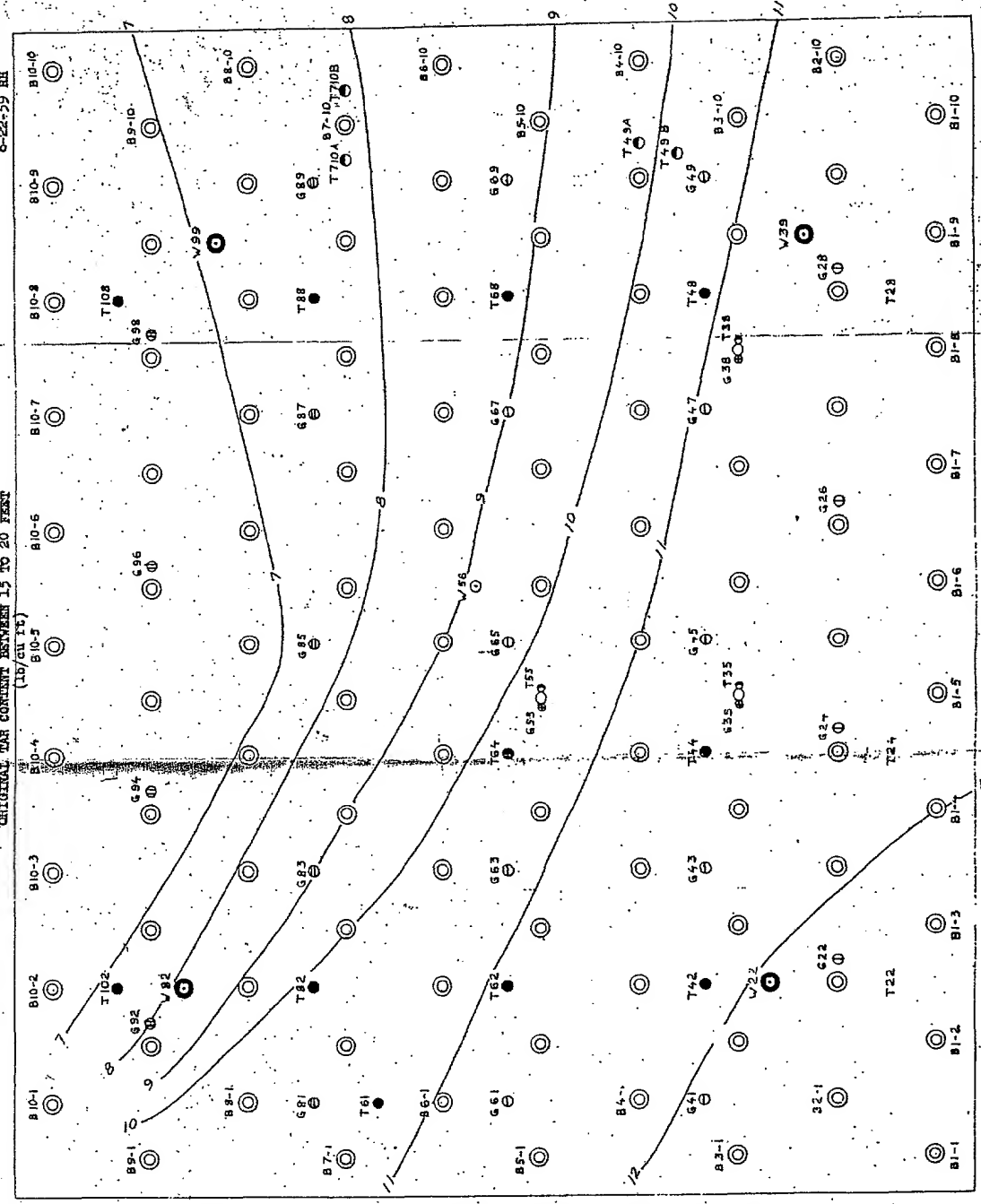
Figure 16
ORIGINAL TAR CONTENT BETWEEN 10 TO 15 FEET
(lb/cu ft)



TEMPERATURE WELL 5' 9" FROM ADJACENT BURNER. 55' 3 3/4" HOLE. 52' 2" CASING.
IN BURNER HOLE 52' 1" CASING.
3' (T49B 4') FROM ADJACENT BURNER. 55' 3 3/4" HOLE. 52' 2" CASING.

13-217-4
6-22-59 RH

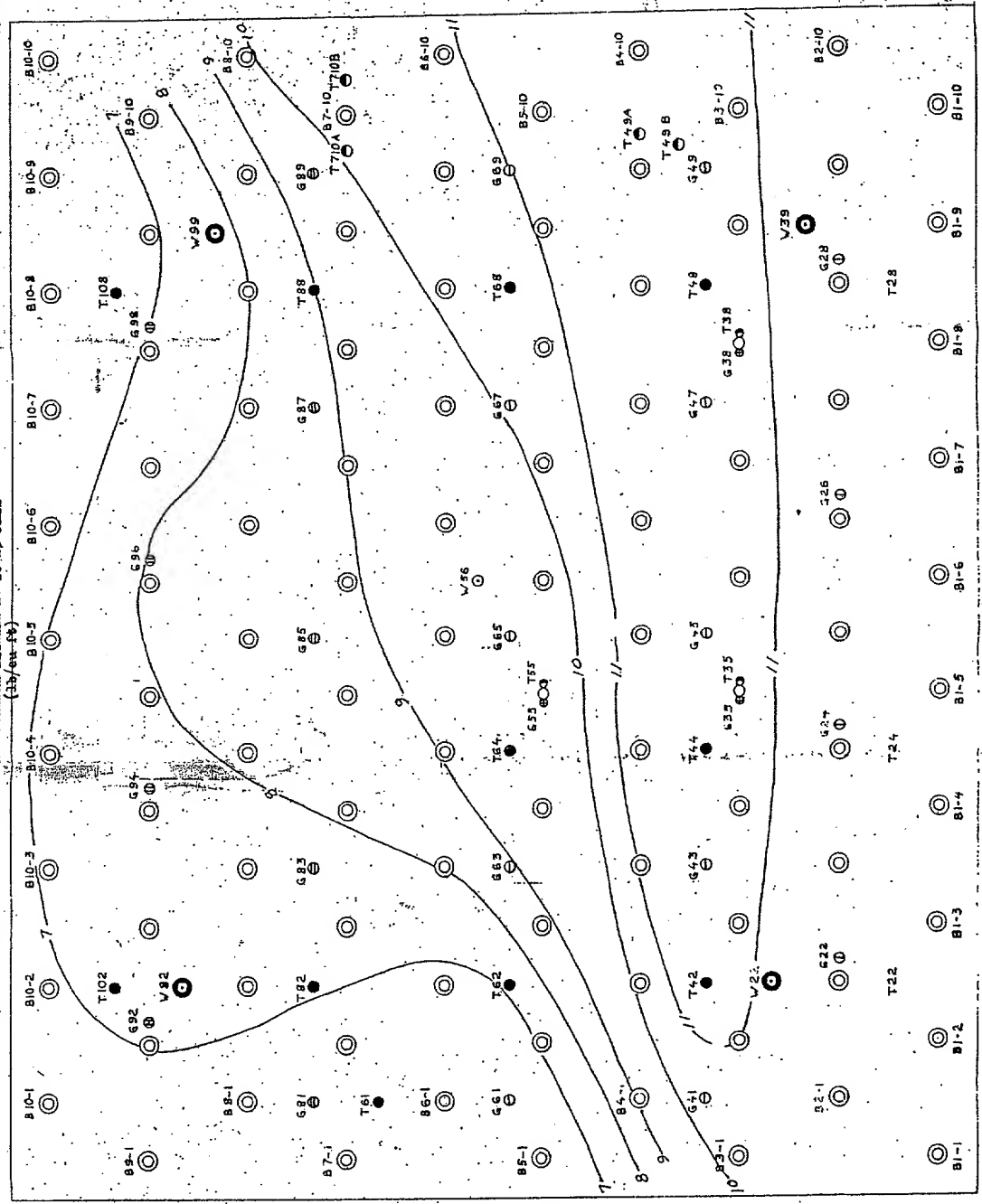
Figure 17
ORIGINAL TAR CONTENT BETWEEN 15 TO 20 FEET
(lb/gal ft)



TEMPERATURE WELL 5'9" FROM ADJACENT BURNER. 55.3% HOLE. 52.2" CASING.
IN BURNER HOLE. 52.1" CASING.
3' (T498 4') FROM ADJACENT BURNER. 55.3% HOLE. 52.2" CASING.

19-017-5
6-22-59 RH

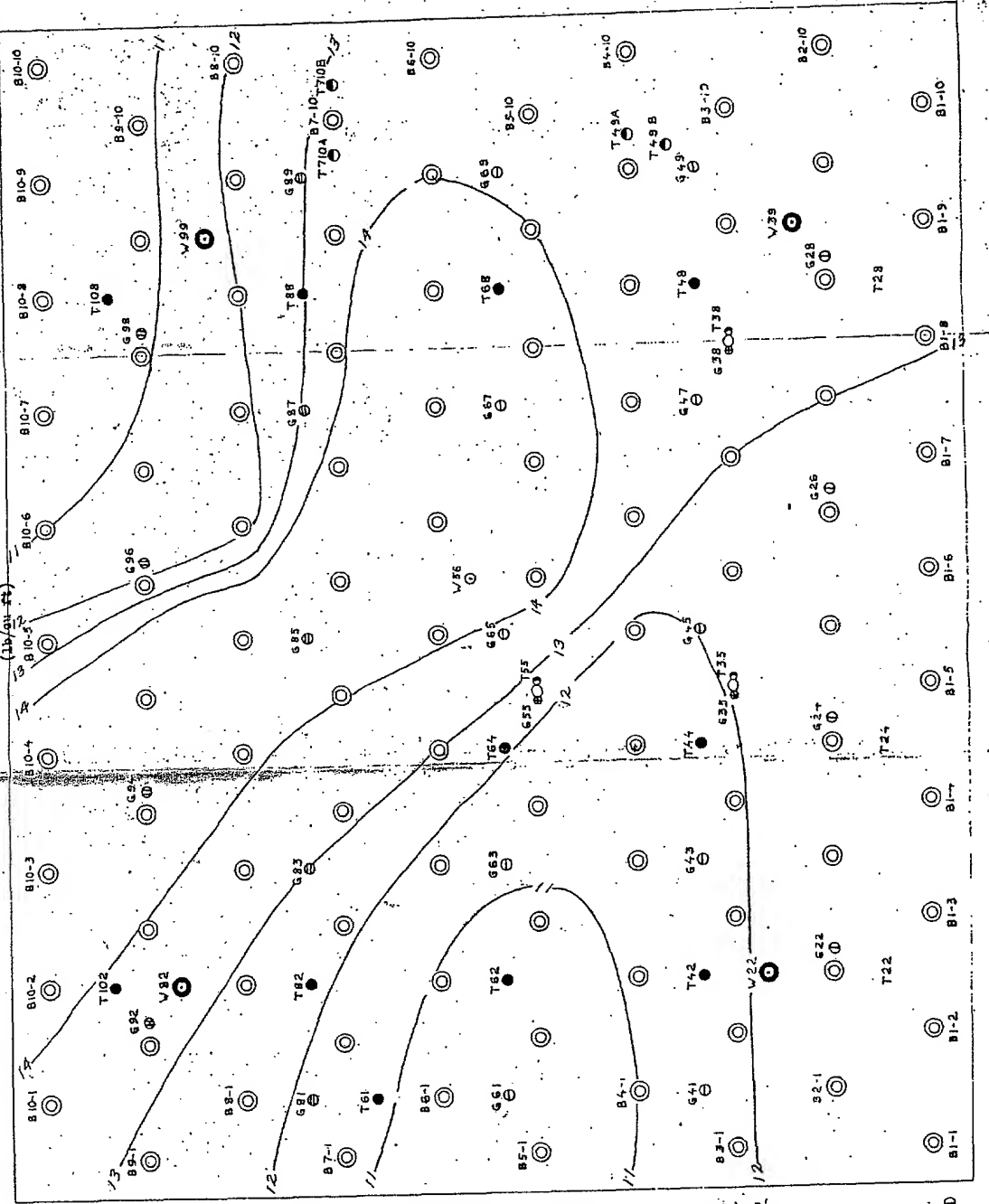
Figure 18
ORIGINAL BAR COUNT BETWEEN 20 TO 25 FEET
(13/08-54)



TEMPERATURE WELL 5.9" FROM ADJACENT BURNER. 55" 3/4" HOLE. 52" 2" CASING.
IN BURNER HOLE. 52" 1" CASING.
3" (T49B 4") FROM ADJACENT BURNER. 55" 3/4" HOLE. 52" 2" CASING.

19-217-6
6-29-59 RE

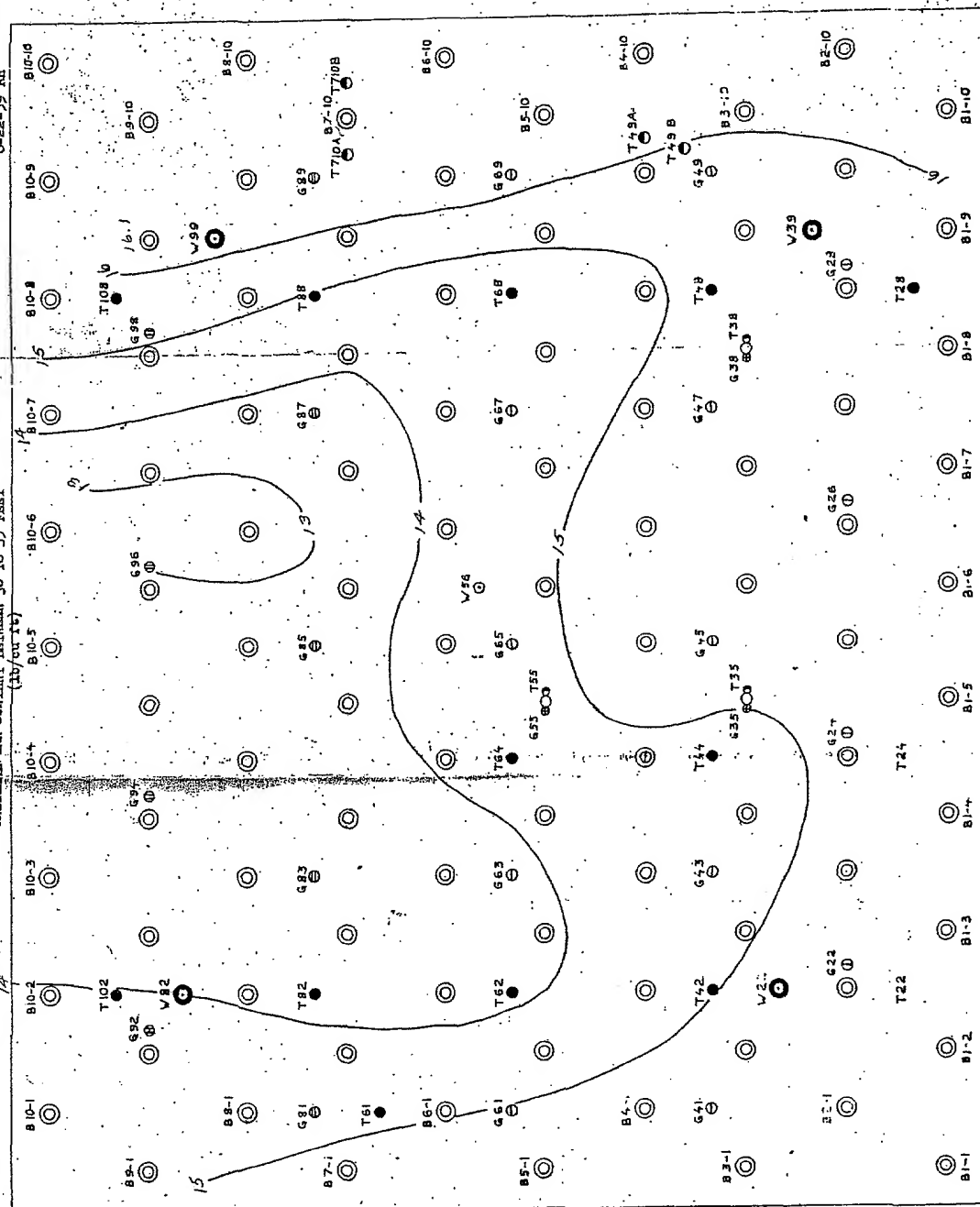
Figure 19
ORIGINAL TAR CONTENT BETWEEN 25 TO 30 FEET
(15/100 FT)



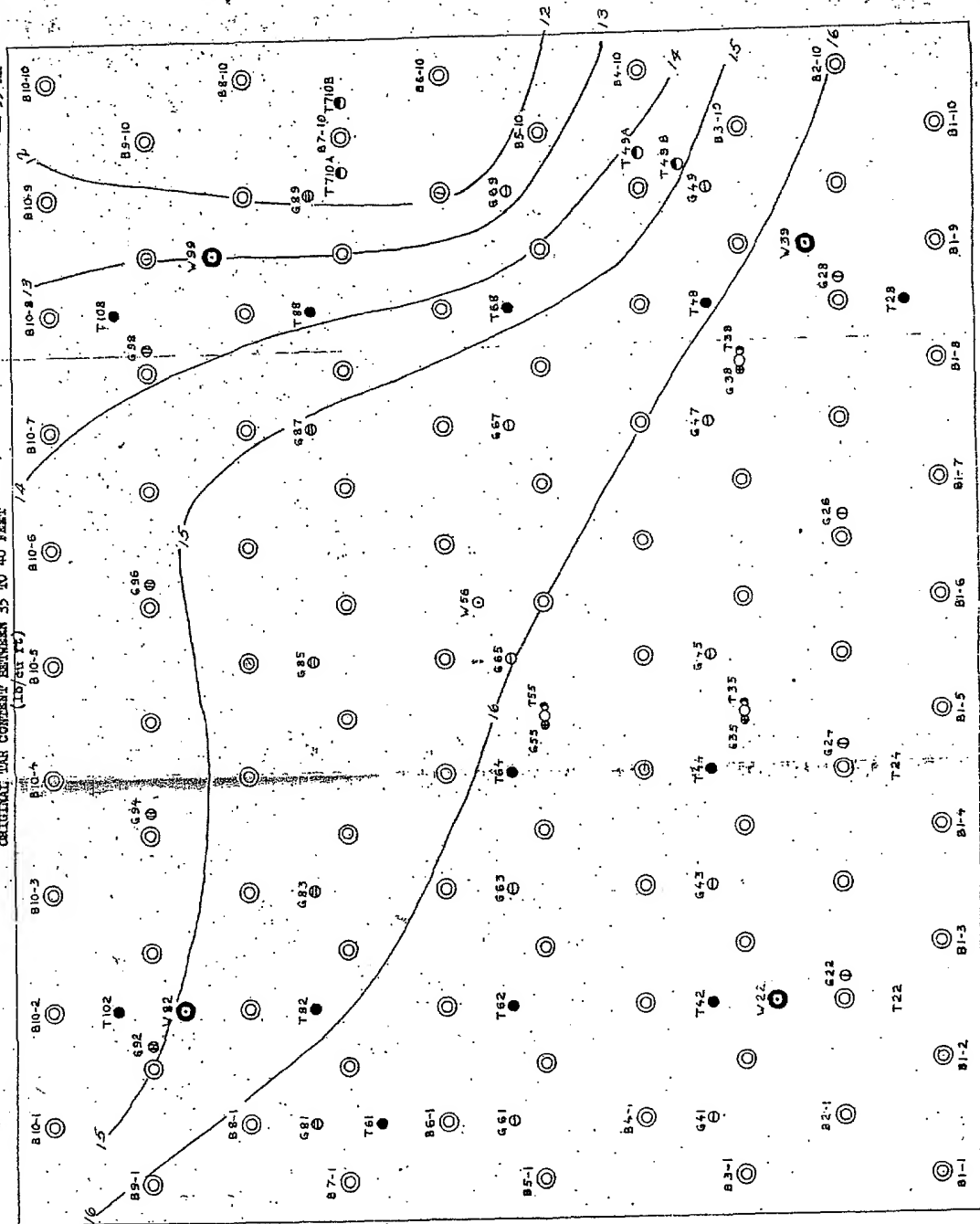
● ● ● ●
TEMPERATURE WELL 5.9" FROM ADJACENT BURNER. 55' 3 3/4" HOLE. 52' 2" CASING.
IN BURNER HOLE. 52' 1" CASING.
3' (1498 4) FROM ADJACENT BURNER. 55' 3 3/4" HOLE. 52' 2" CASING.

19-217-7
6-22-59 RH

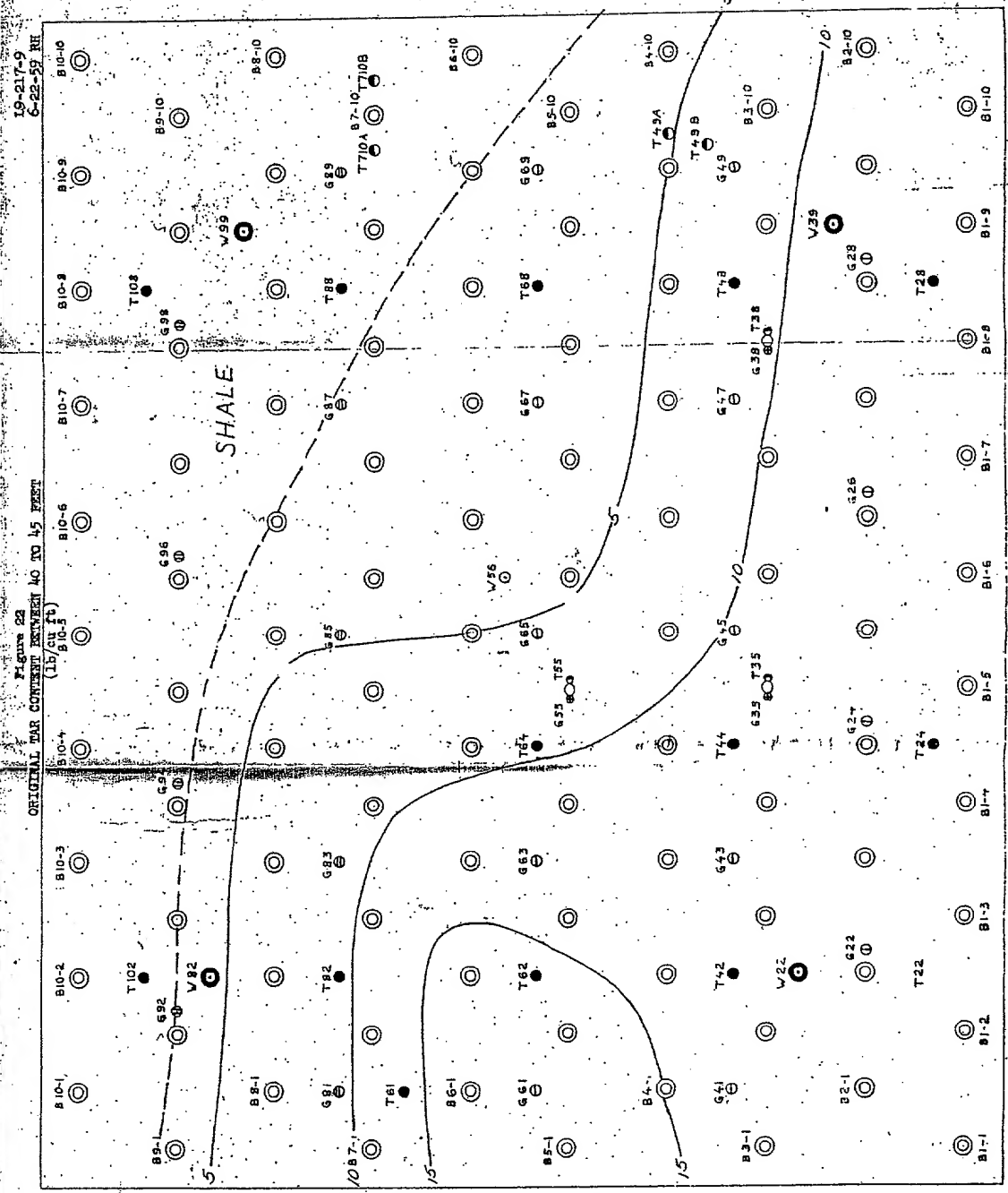
Figure 20
ORIGINAL TER CONTENT BETWEEN 30 TO 35 FEET
(lb/ cu ft)



TEMPERATURE WELL 5.9' FROM ADJACENT BURNER. 55' 3/4" HOLE. 52' 2" CASING.
IN BURNER HOLE. 52' 1" CASING.
3' (T49B 4') FROM ADJACENT BURNER. 55' 3/4" HOLE. 52' 2" CASING.



TEMPERATURE WELL 5.9' FROM ADJACENT BURNER .55 33/4" HOLE .52, 2" CASING.
" " IN BURNER HOLE .52, 1" CASING.
" " 3' (T49B 4') FROM ADJACENT BURNER .55 33/4" HOLE .52, 2" CASING.

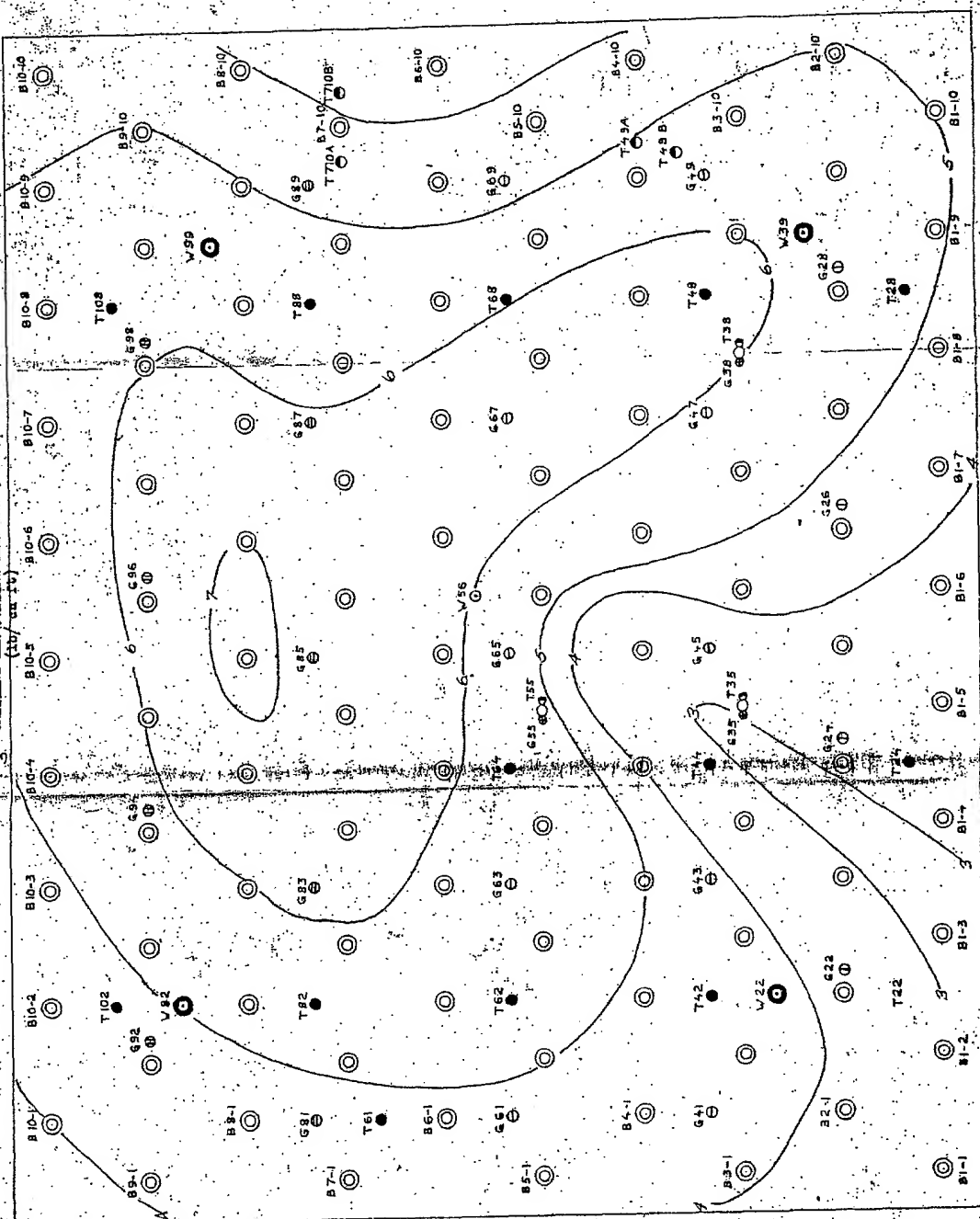


19-217-9
6-22-59 BH

FIGURE 22
ORIGINAL BAR CONTENT RANGES 40 TO 15 FEET
(15/100 FT)

● TEMPERATURE WELL, 5.9' FROM ADJACENT BURNER, 55' 3 3/4" HOLE, 52' 2" CASING.
● IN BURNER HOLE, 52' 1" CASING.
● (T49B 4') FROM ADJACENT BURNER, 55' 3 3/4" HOLE, 52' 2" CASING.

Figure 23
ORIGINAL TAR CONTENTS BETWEEN 45 TO 55 FIRST
(1b/ cu ft)



TEMPERATURE WELL 5.9' FROM ADJACENT BURNER 55 3/4" HOLE 52.2" CASING.
" " " " IN BURNER HOLE 52.1" CASING.
" " " " 3.179 B 4' FROM ADJACENT BURNER 55 3/4" HOLE 52.2" CASING.

HOLE PATTERN OF TEST L9

L9-101
JAN 21 1958
REVISED 3.15.58 AP

- BURNER, 15' 5 5/8" AND 40' 4 3/4" HOLE, 52' 2 1/2" CASING.
- CONCENTRIC GASWELL AROUND BURNER, 13' 4 50" 4 22" CASING.
- SEPARATE GASWELL IN BURNERHOLE, 15' 1 1/2" CASING.
- 2' FROM ADJACENT BURNER, 20' 3 3/4" HOLE, 15' 1 1/2" CASING.
- 50' 3 3/4" HOLE FILLED WITH GRAVEL TO 15'; 15' 1 1/2" CASING.
- CONCENTRIC GASWELL AROUND WATER WELL, 15' 4 50" 4 22" CASING.
- WATER WELL, 5' 9" FROM ADJ. BURNER, 55' 5 5/8" HOLE, 50' 1 1/2" TUBING, W56; 75' 5 5/8" HOLE, 40' 3 1/2" AND 10' 4" TUBING.
- TEMPERATURE WELL, 5' 9" FROM ADJACENT BURNER, 55' 3 3/4" HOLE, 52' 2" CASING.
- IN BURNERHOLE, 52' 1" CASING.
- 3' (T+98 4') FROM ADJACENT BURNER, 55' 3 3/4" HOLE, 52' 2" CASING.

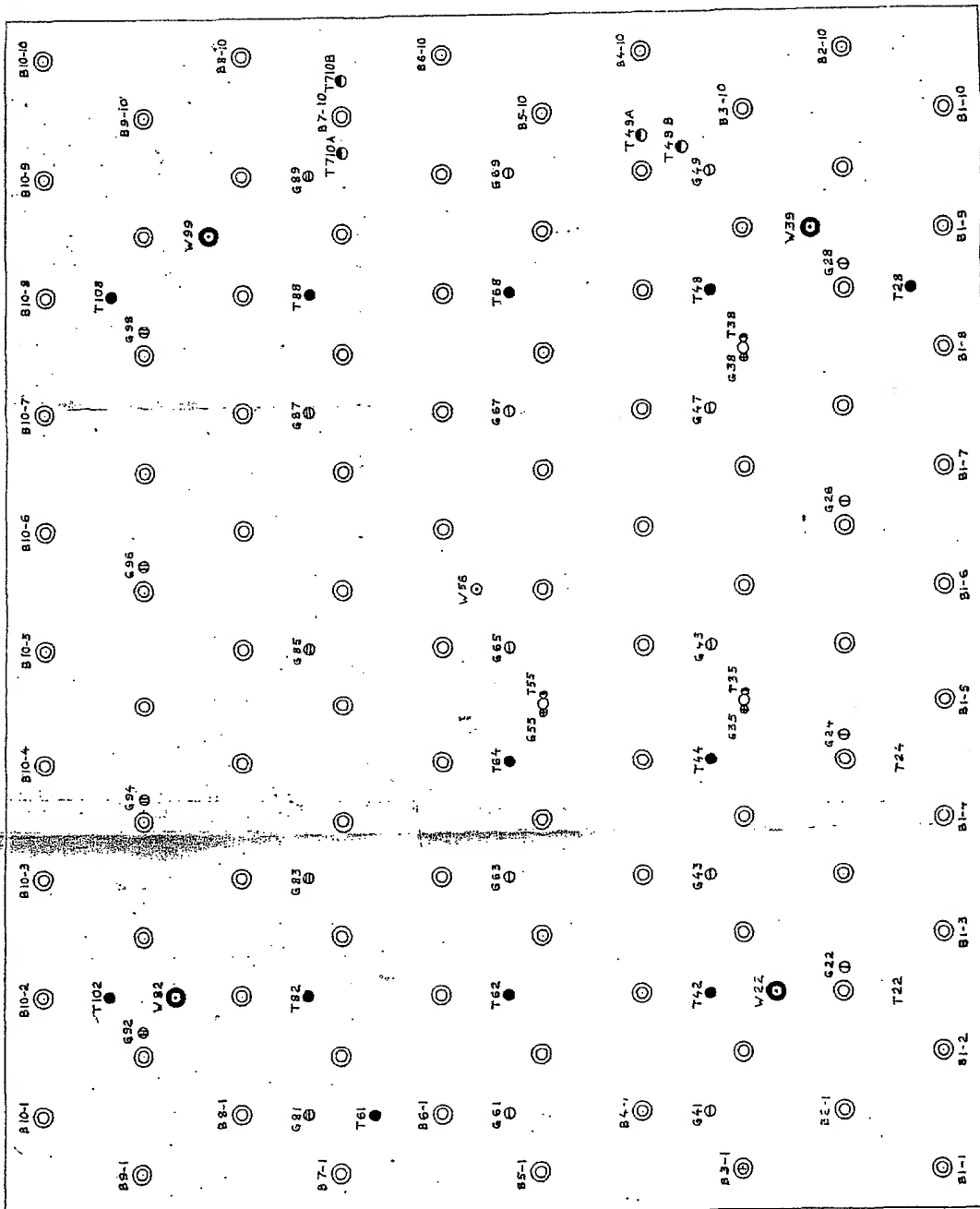


Figure 24

LINS-BURNER TYPE C FOR L9

L9-100
I. 10. 1958
M.E.

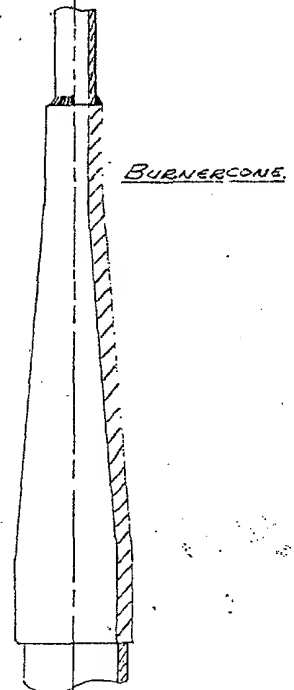
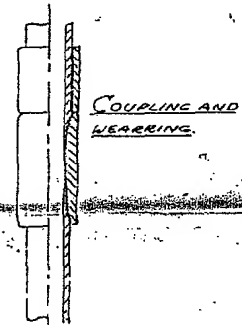
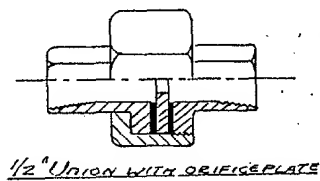
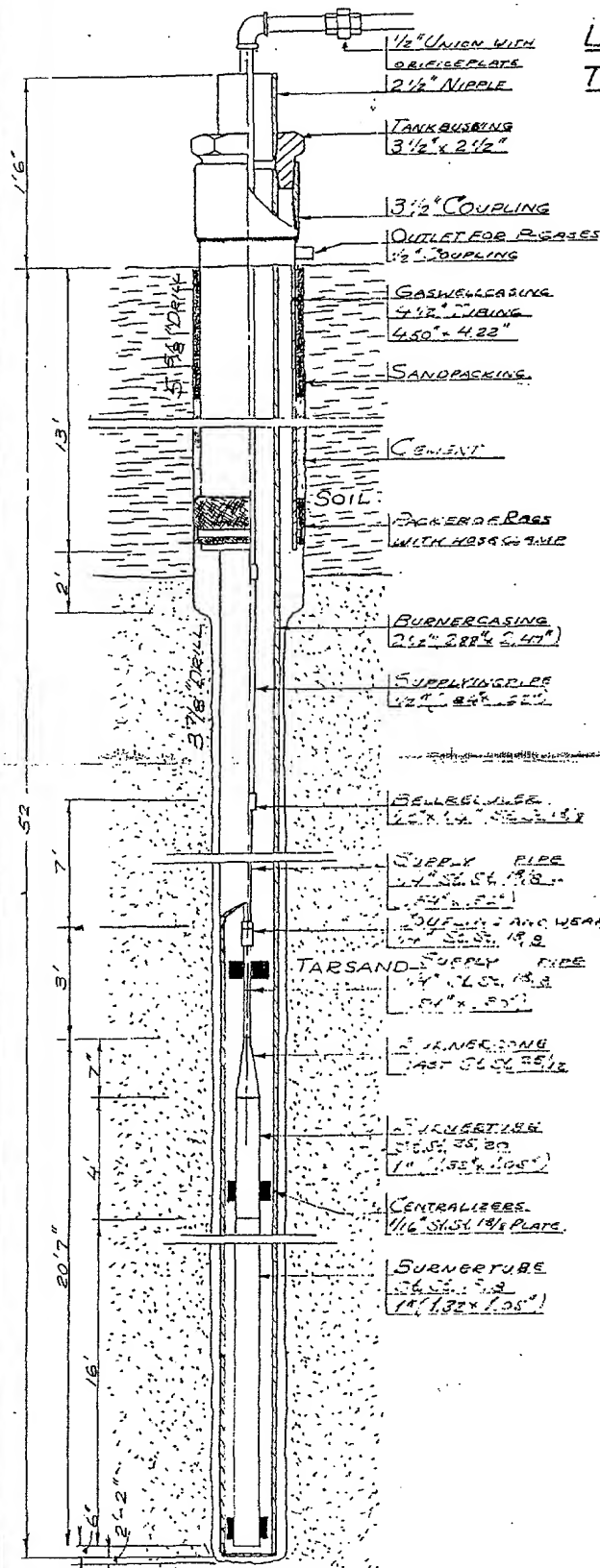
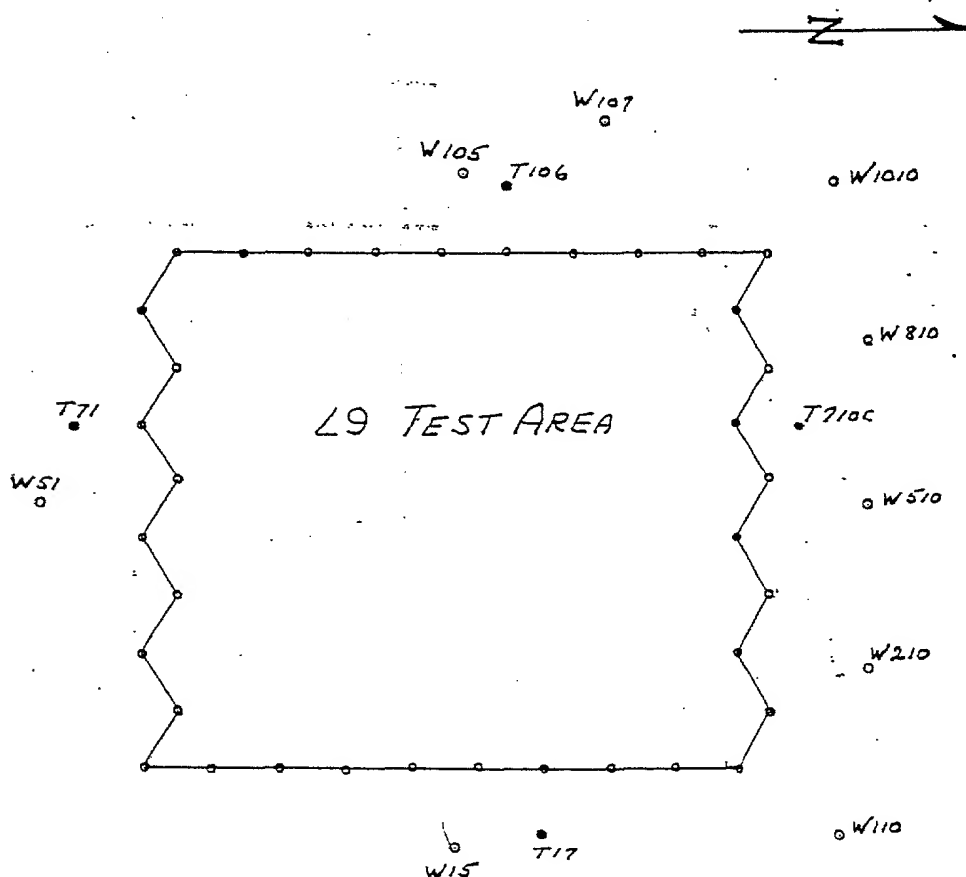


Figure 25

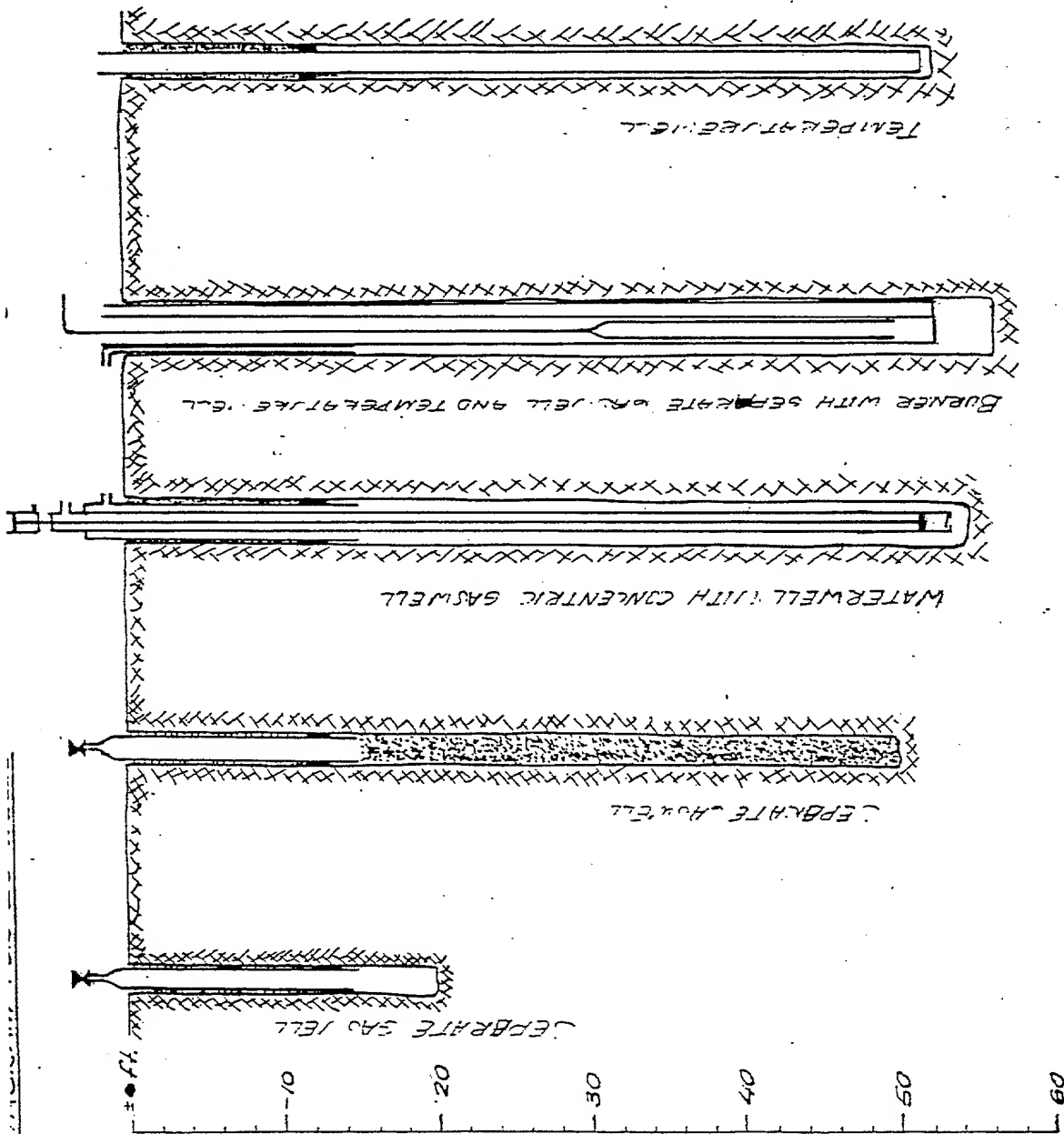
L9-105
5.26.59.HP

Figure 27

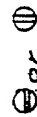
WATER WELLS AND TEMPERATURE WELLS OUTSIDE L9.



<u>Well, No.</u>	<u>Location</u>
W15,105	12 feet outside the edge of the field.
W51,105,110,210	15 " " " " " "
W510,810,1010	15 " " " " " "
W107	20 " " " " " "
T17	10 " " B1-7.
T71	10 " " B7-1.
T710C	10 " " B7-10
T106	10 " " B10-6



SYMBOLS FROM
DRAWING L9-101.

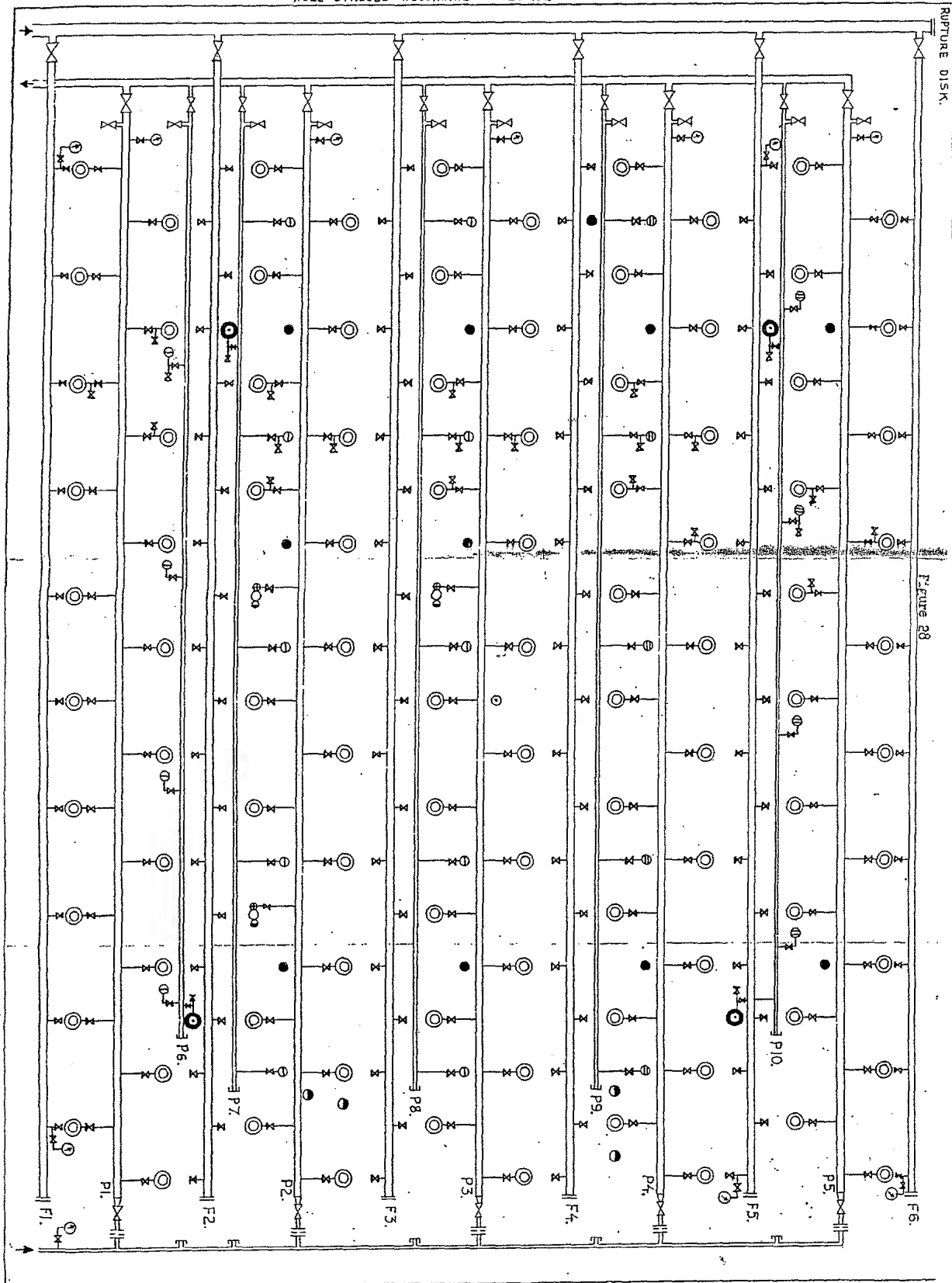


F-, P- AND R- LINES OF TEST L9.

F-LINE, 3"
 F-LINE, 2"
 P-LINE, 2"
 P-LINE, 1"
 R-LINE, 1"
 1/2" PIPE.

HOLE SYMBOLS ACCORDING TO L9-101.

L9-102
 JAN. 24, 1958. B.P.



IX 15 1958 ③

To L9

FUEL STATION FOR L9

Figure 29

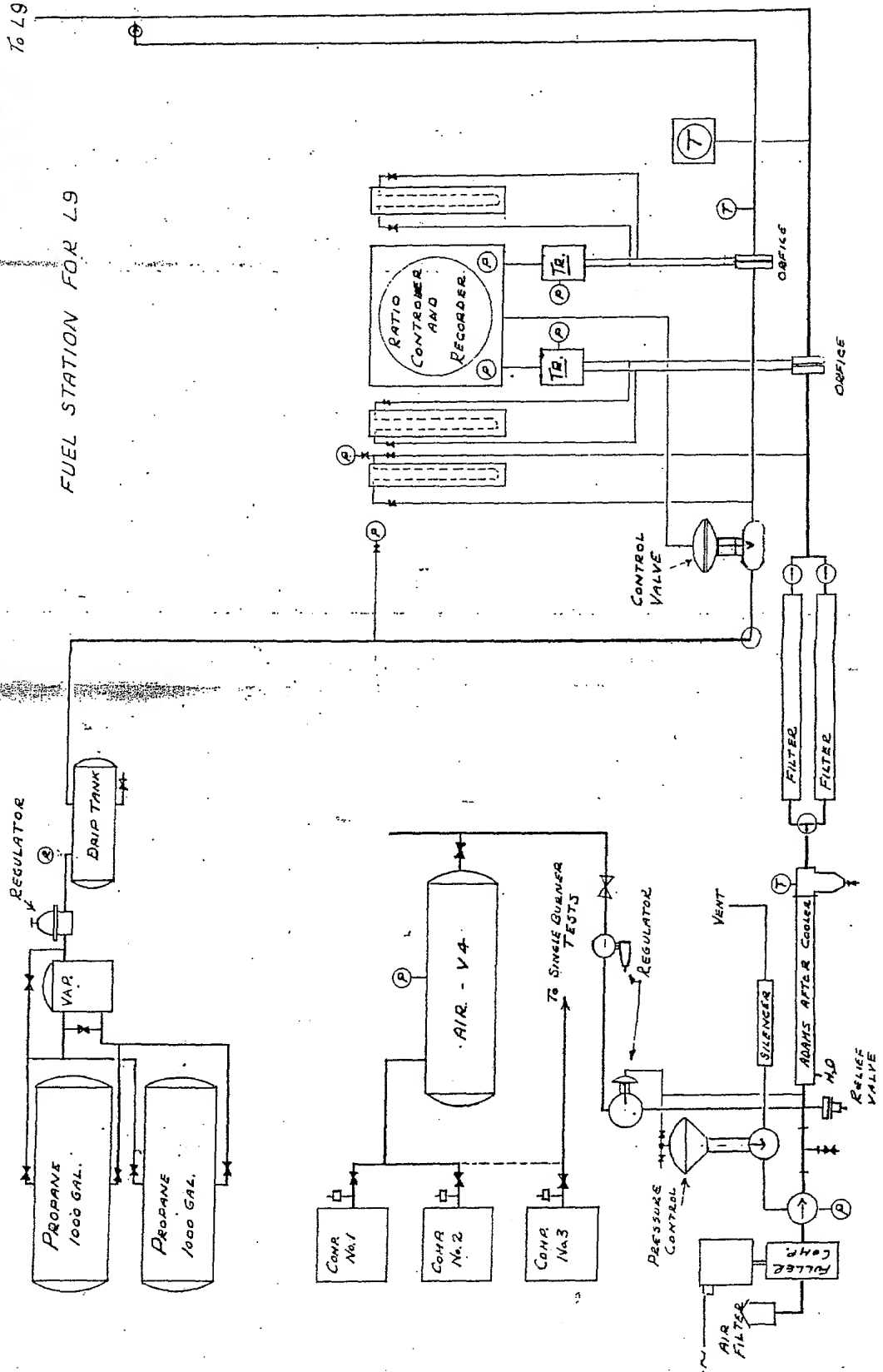
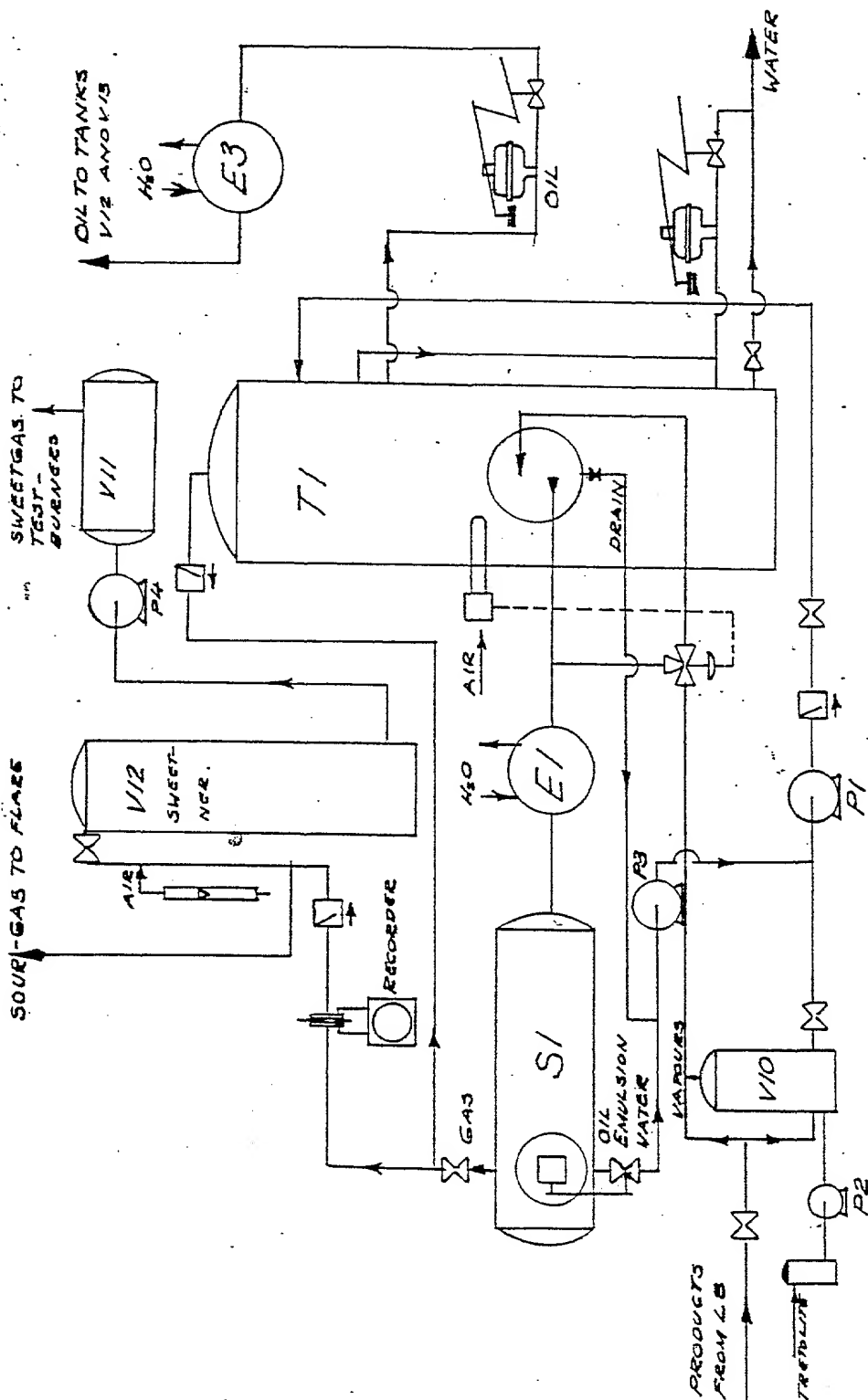


Figure 30

PRODUCT STATION
FOR L8A

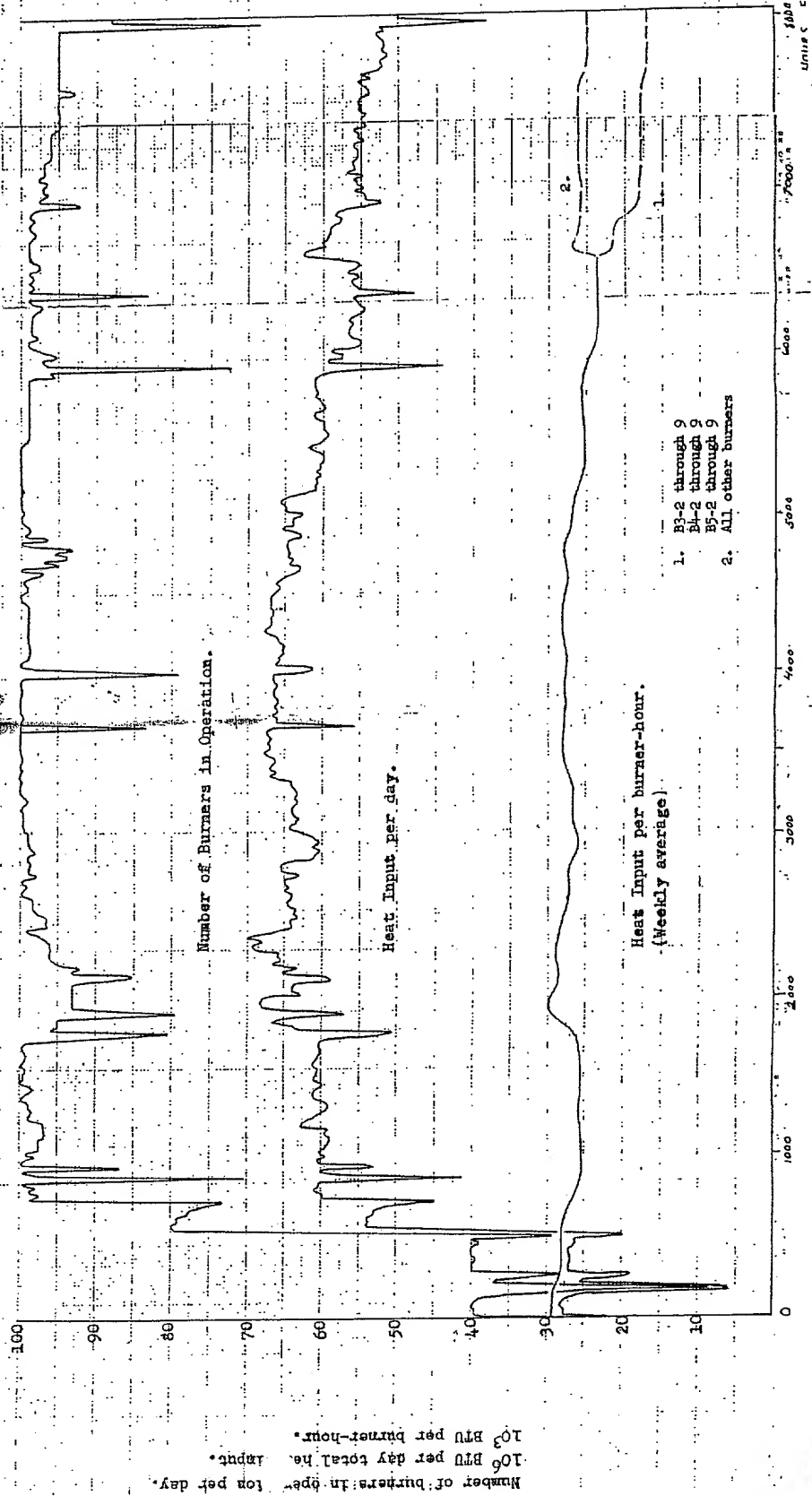
L8 - 110
10-16-1957



19-316.
3-25-59, BP

Figure 31

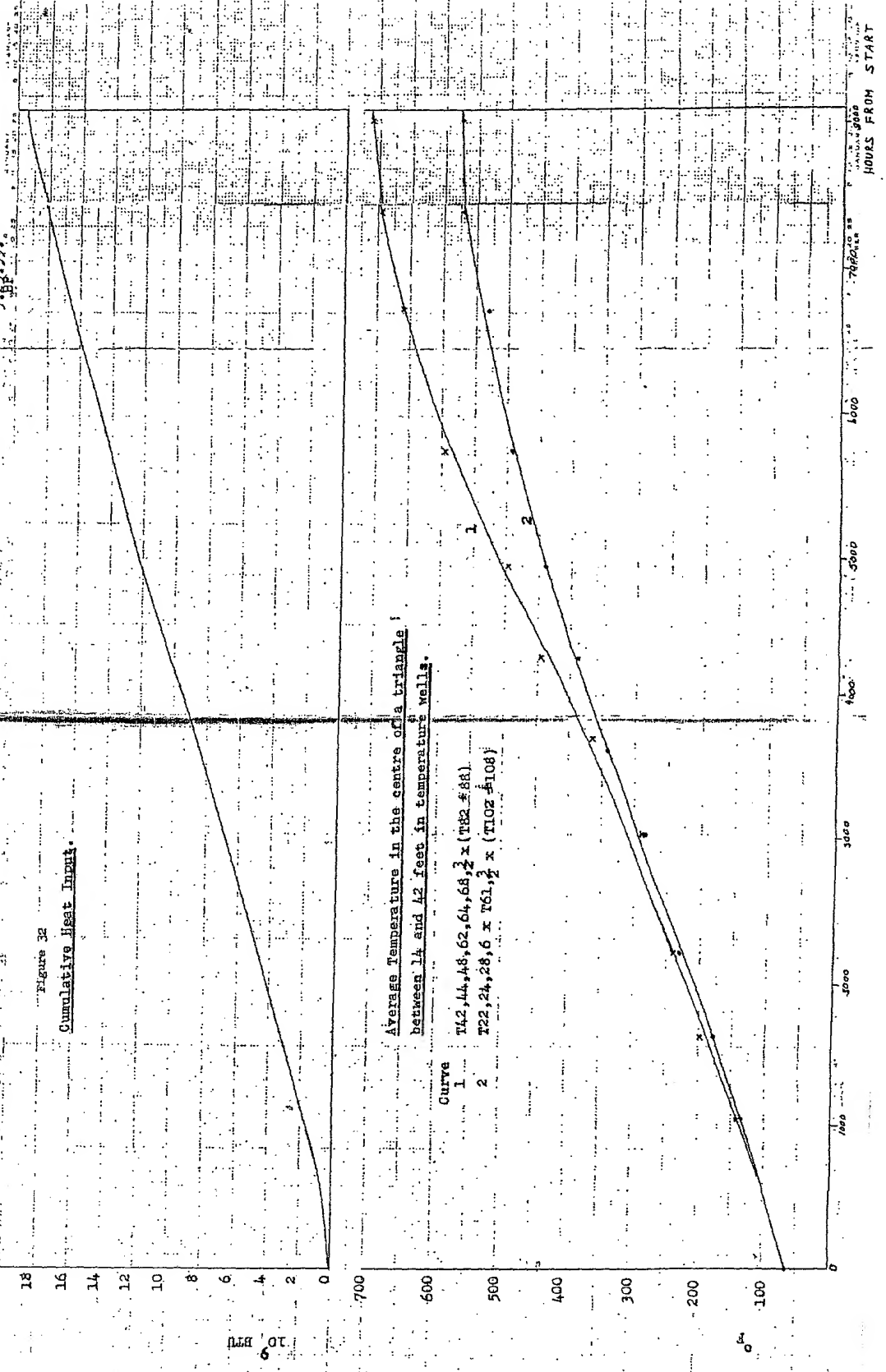
19 HEAT INPUT DATA.

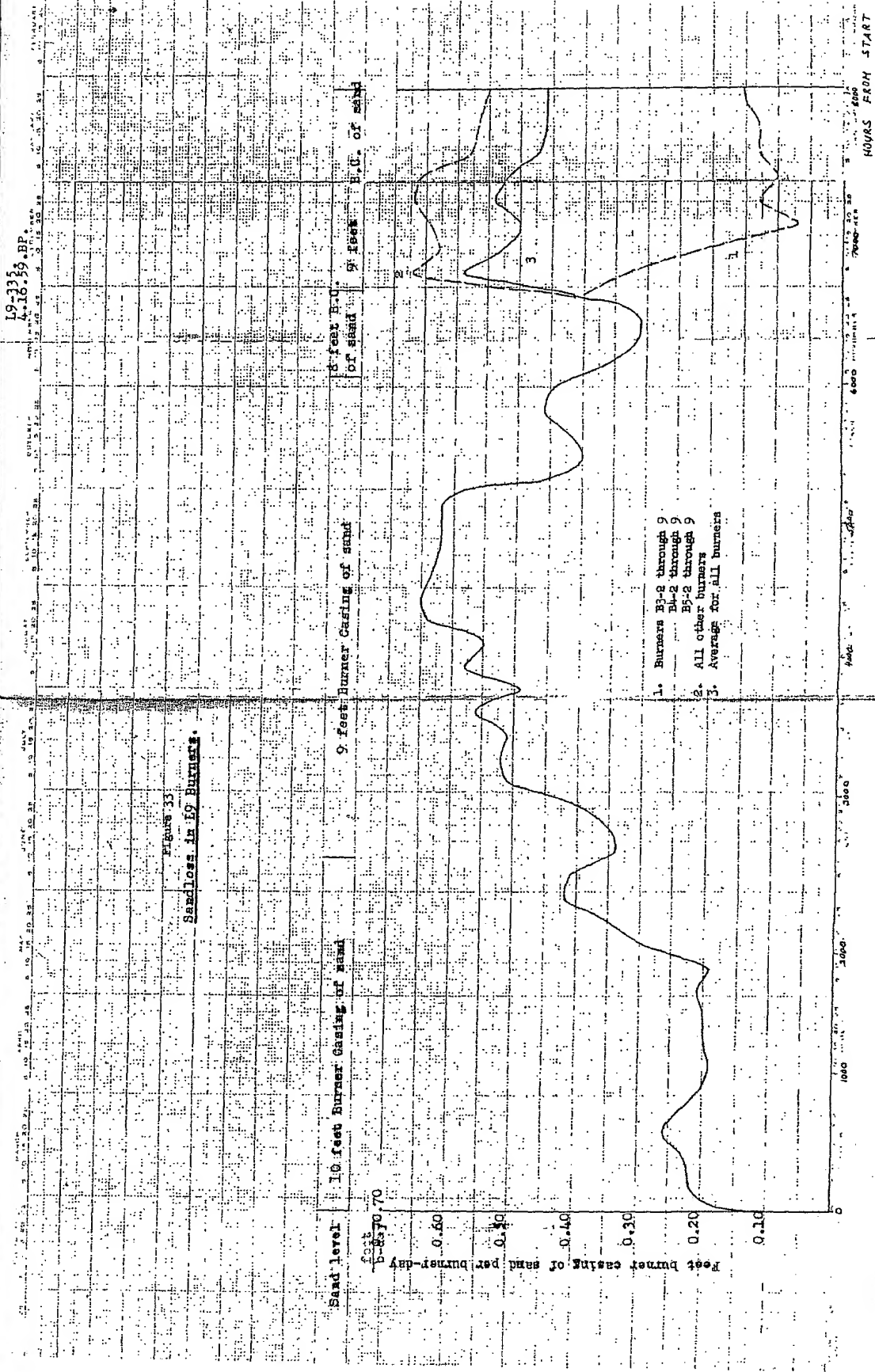


Number of burners in operation per day.
10⁶ BTU per day total heat input.
10³ BTU per burner-hour.

19-437
3-85-59.

Figure 32
Cumulative Heat Input.





A close-up, horizontal view of a dark, textured surface, possibly a book cover or endpaper, showing a dense, woven pattern. The texture is highly detailed, with many small, irregular fibers or threads visible, creating a mottled and grainy appearance. The lighting is somewhat uneven, with slightly brighter areas towards the left and darker areas towards the right, emphasizing the three-dimensional quality of the texture.

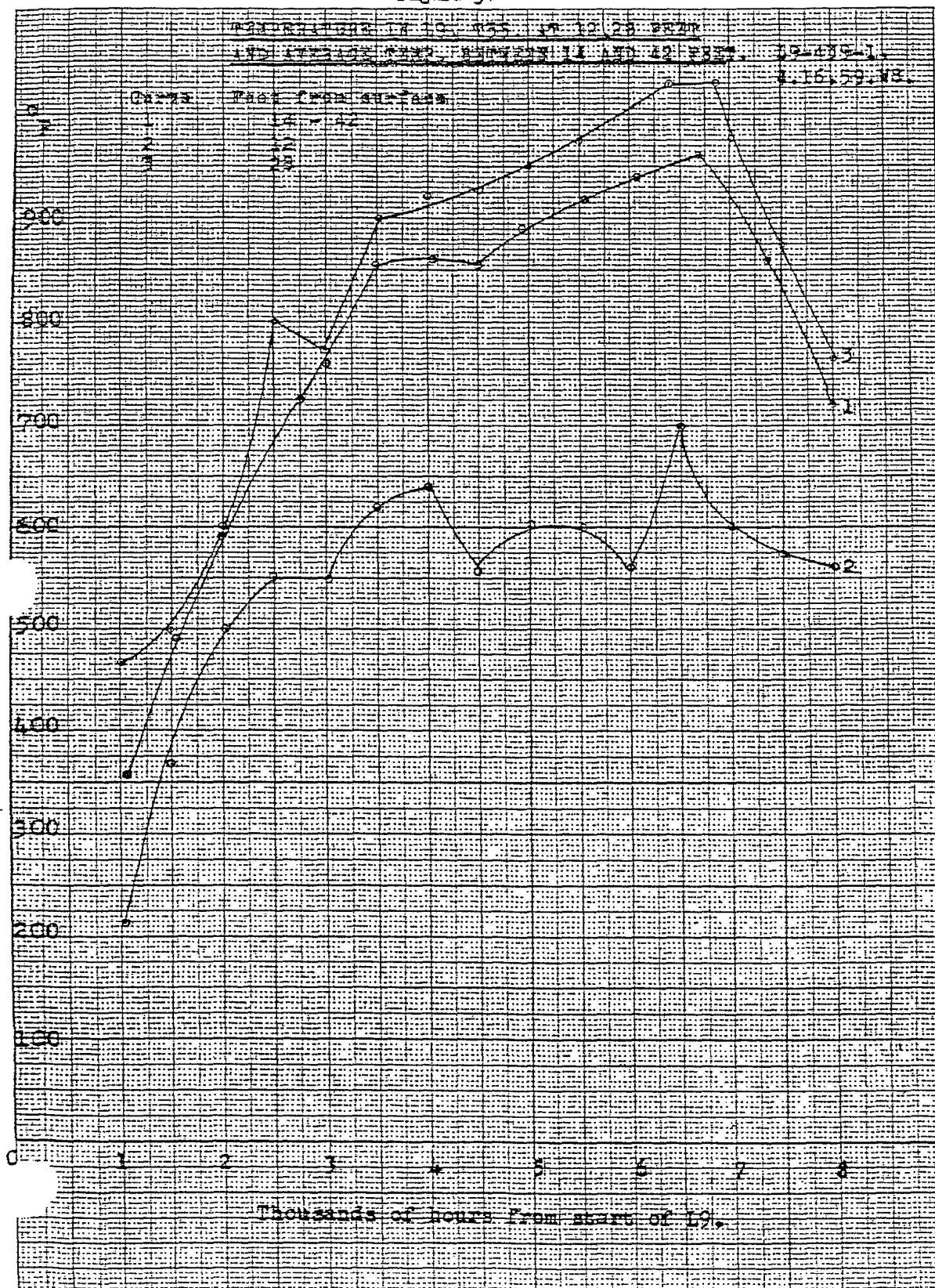


Figure 35

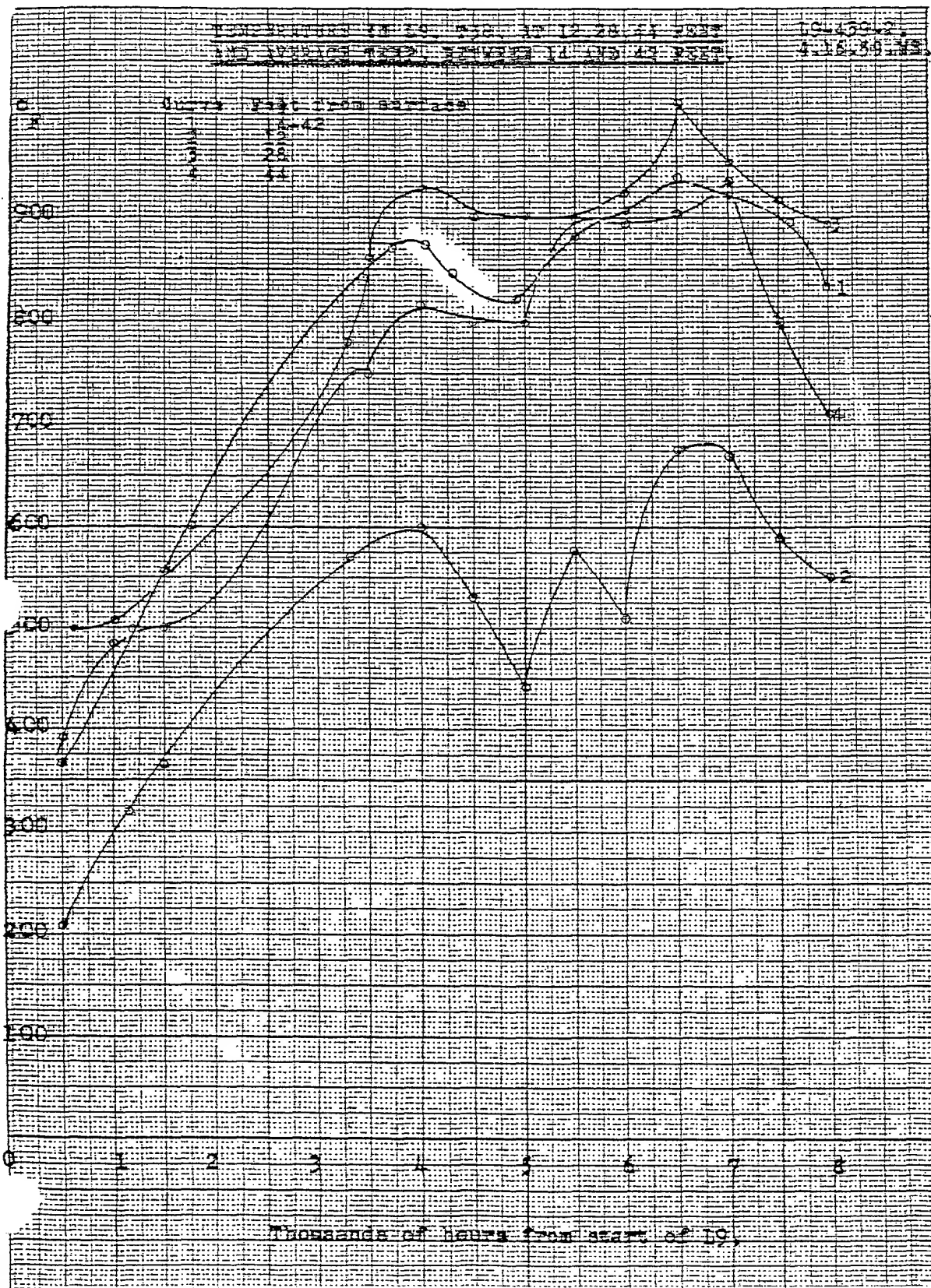


Figure 36

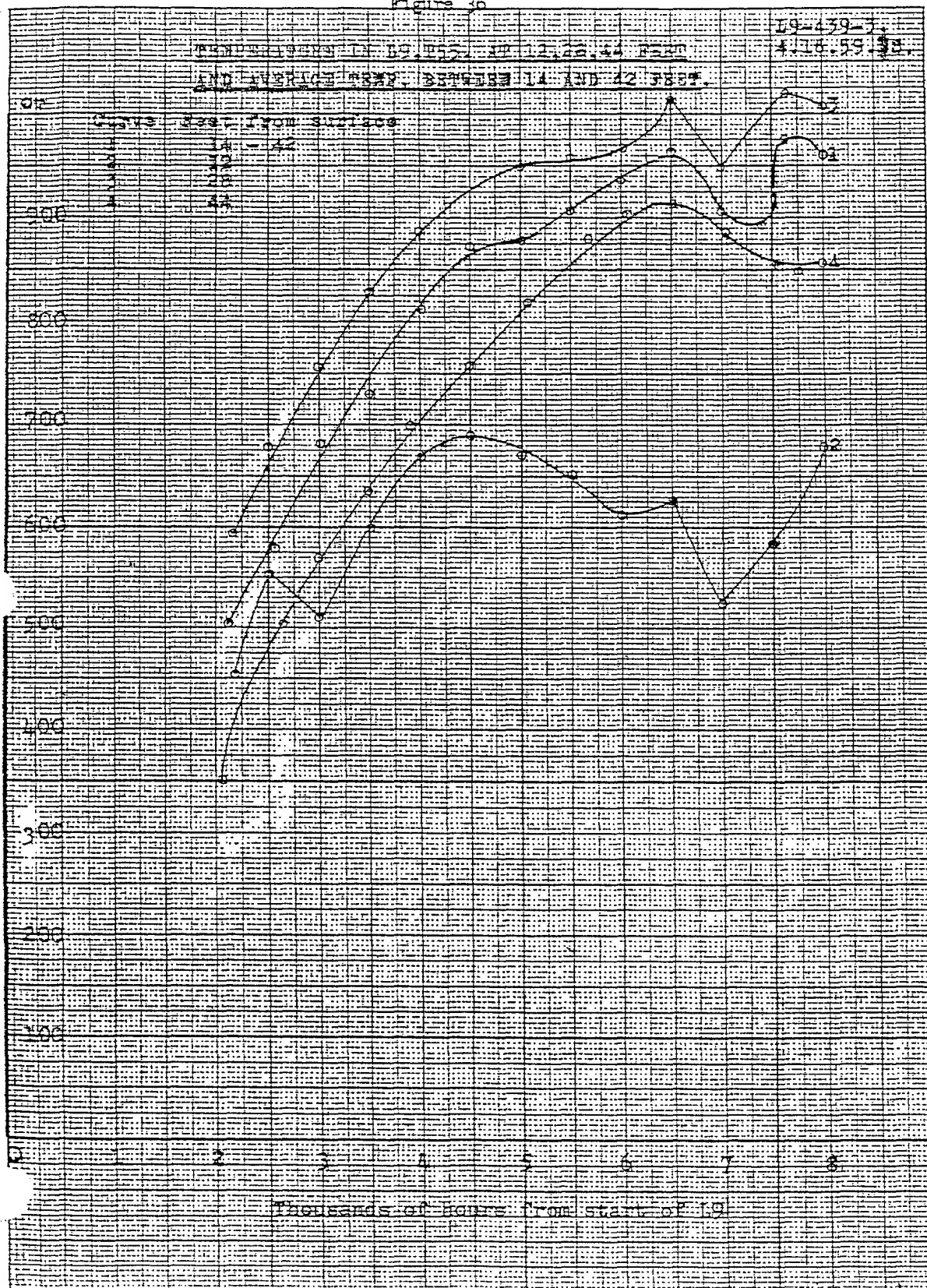


Figure 37

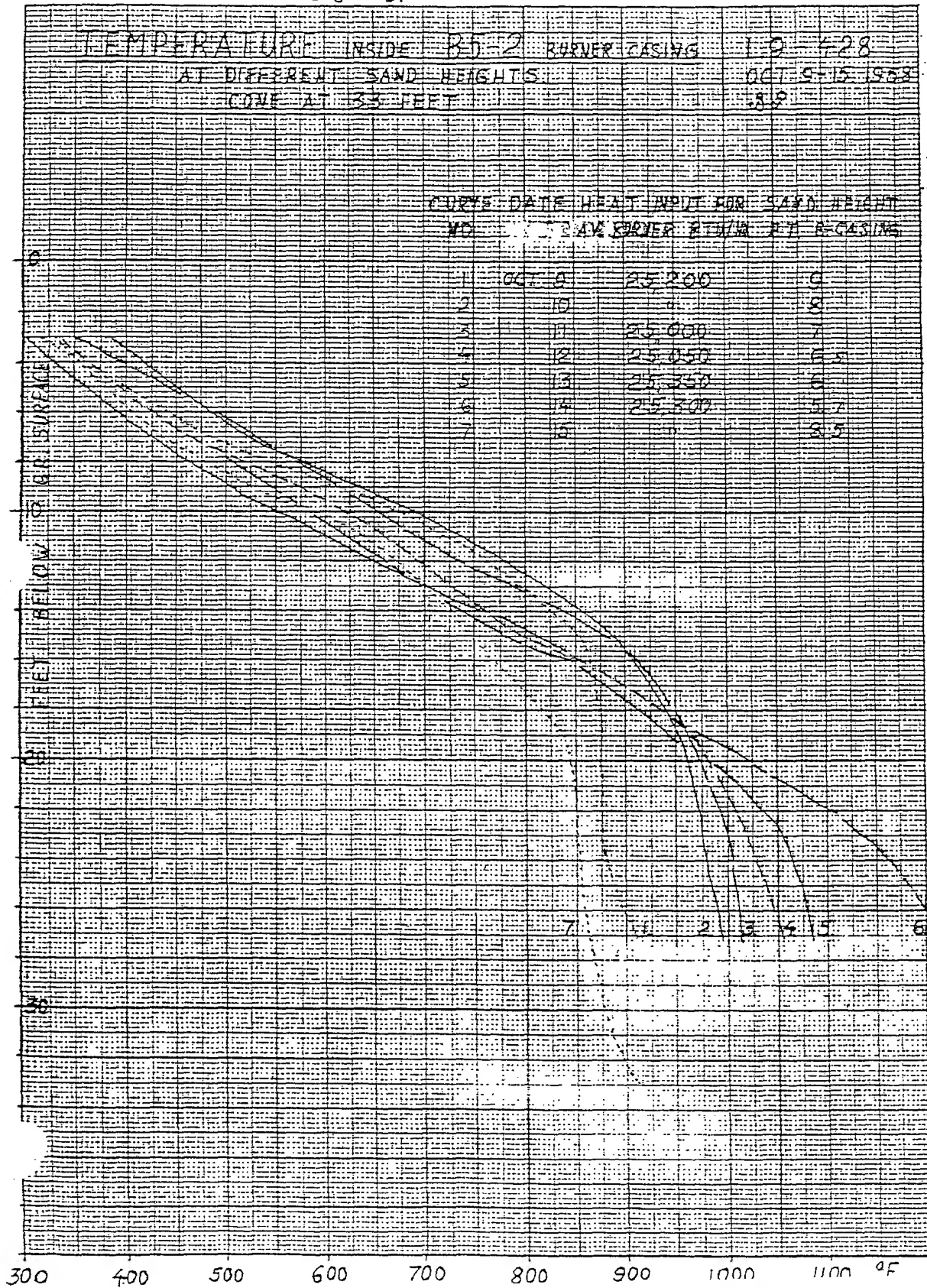


Figure 38

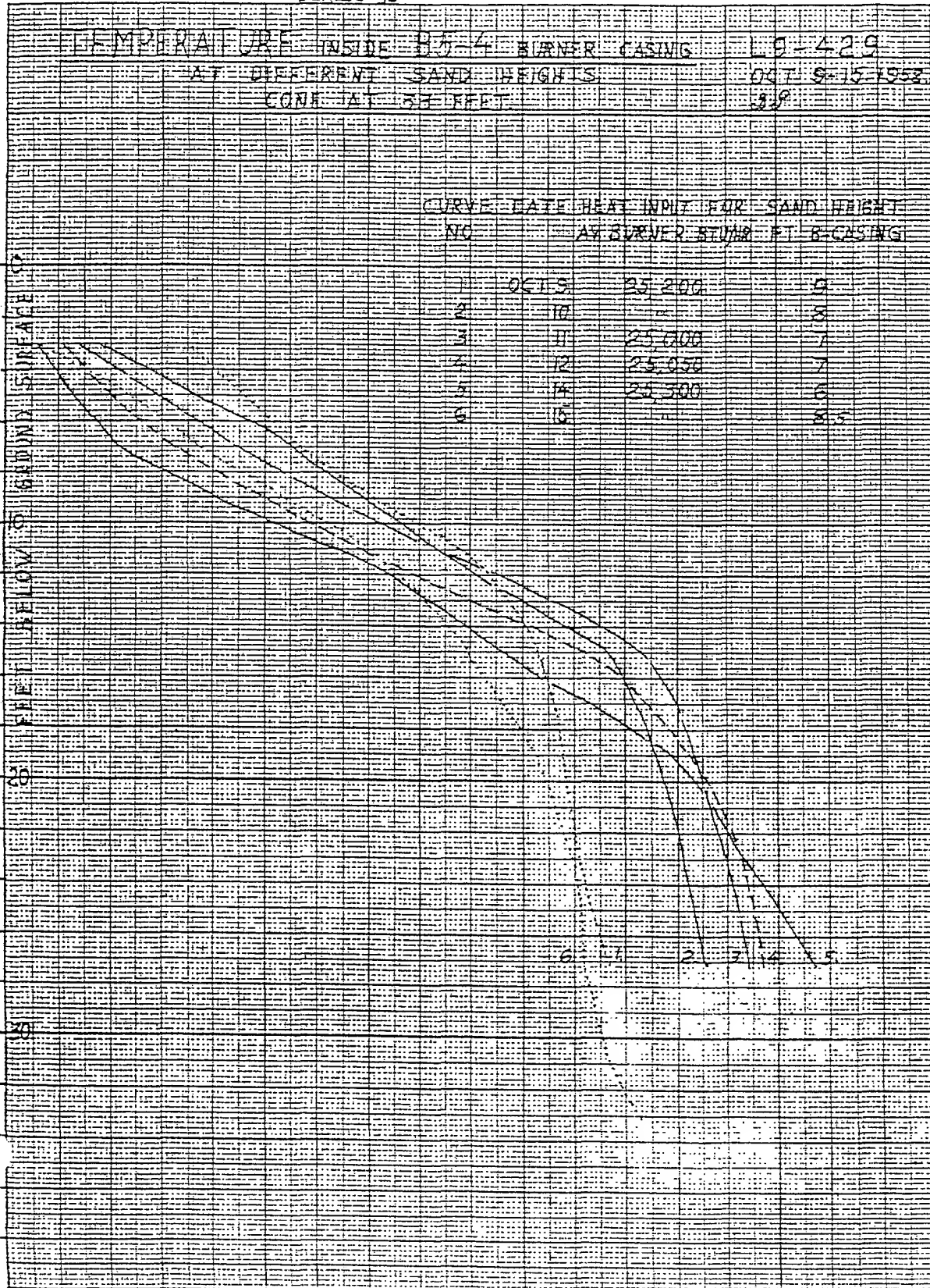


Figure 39

TEMPERATURE OUTSIDE (m3d) AND INSIDE
BURNER CASING 81-5.

10-44-11
1-27-59-43.

Curve	Burner casing	Hours after start
1	Outside	4090
2	*	6410
3	*	7380
4	Inside	4130
5	*	6430
6	*	7370
7	Outside	2400 hours from start down.

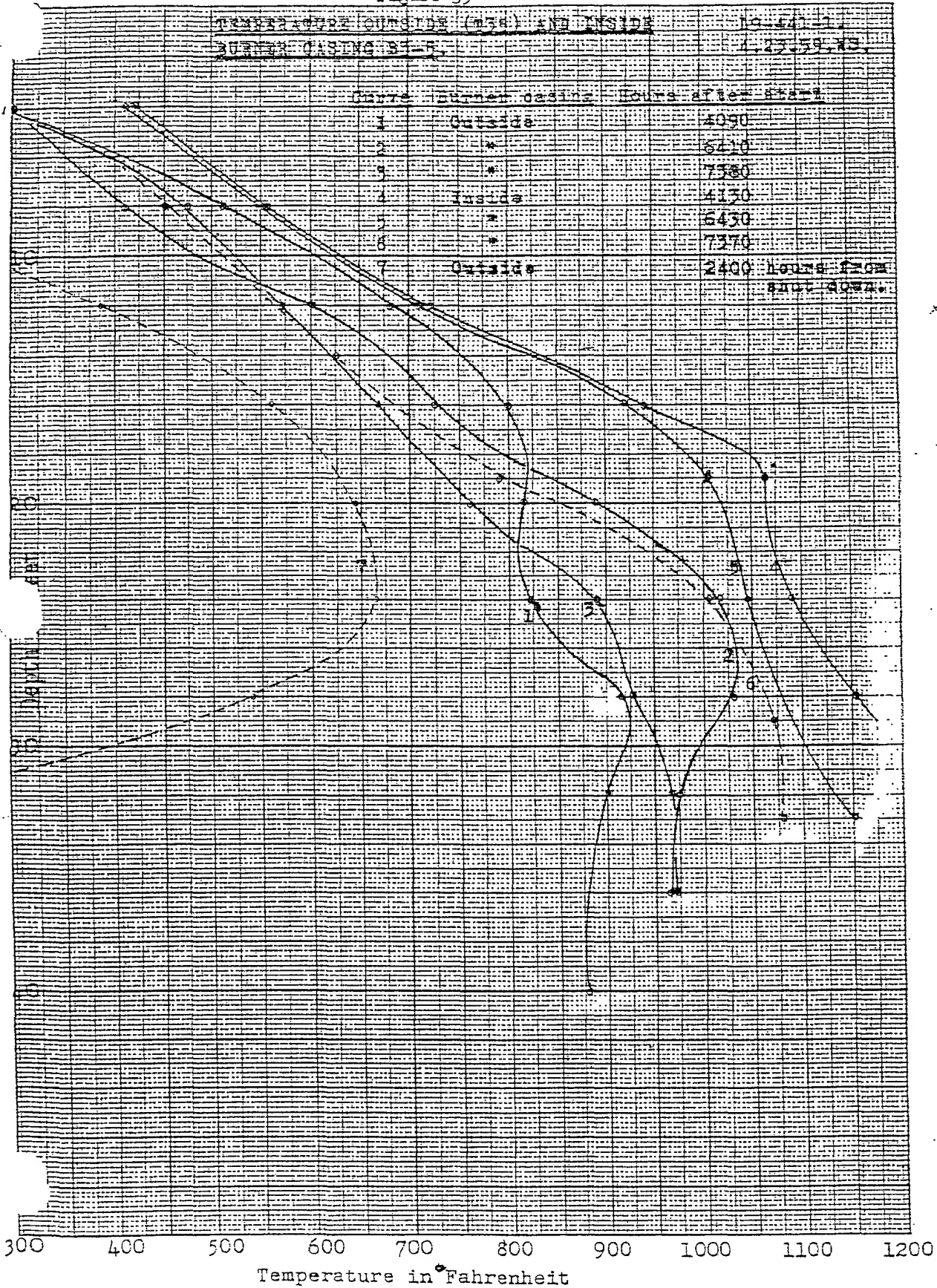


Figure 40

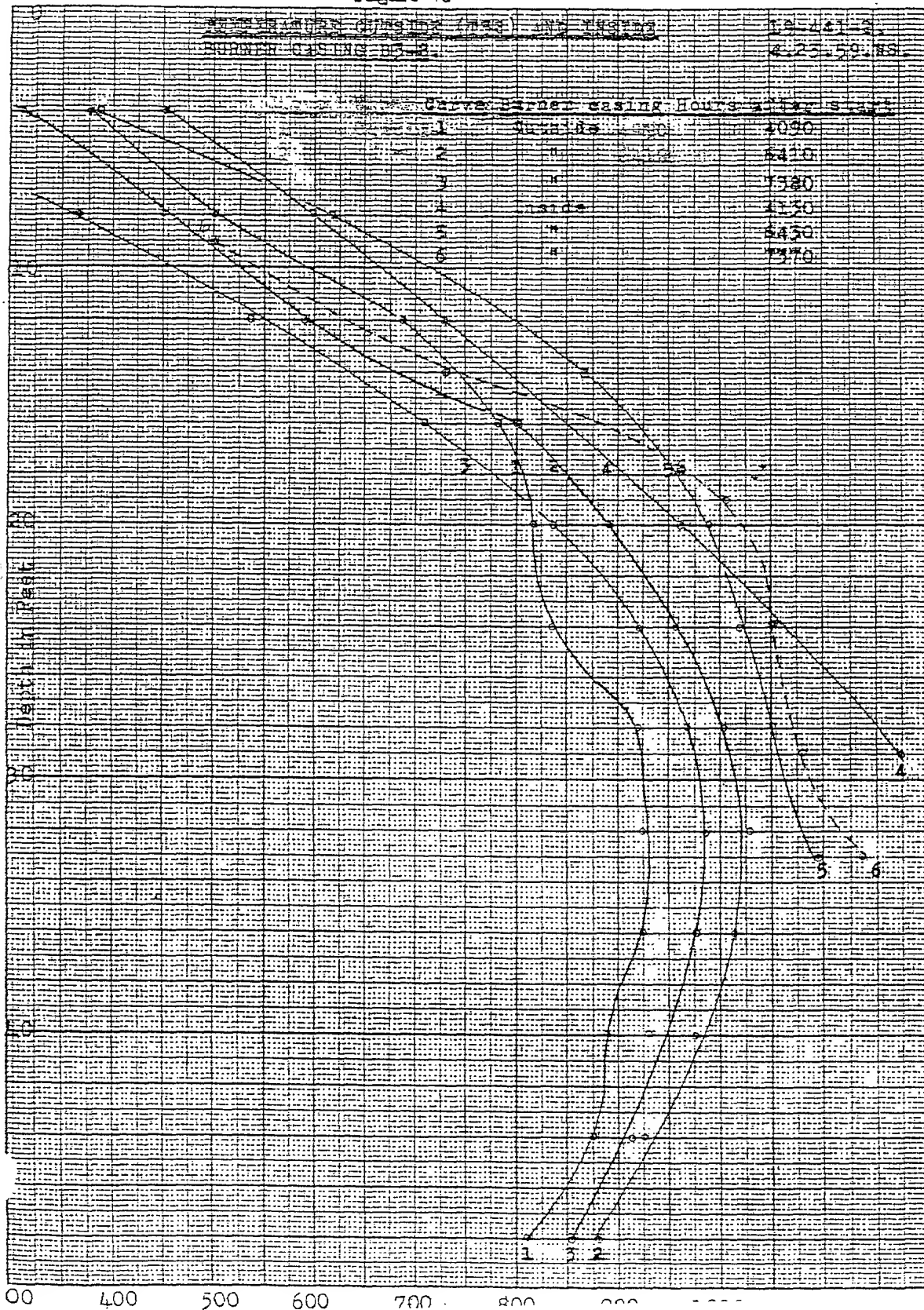


Figure 41

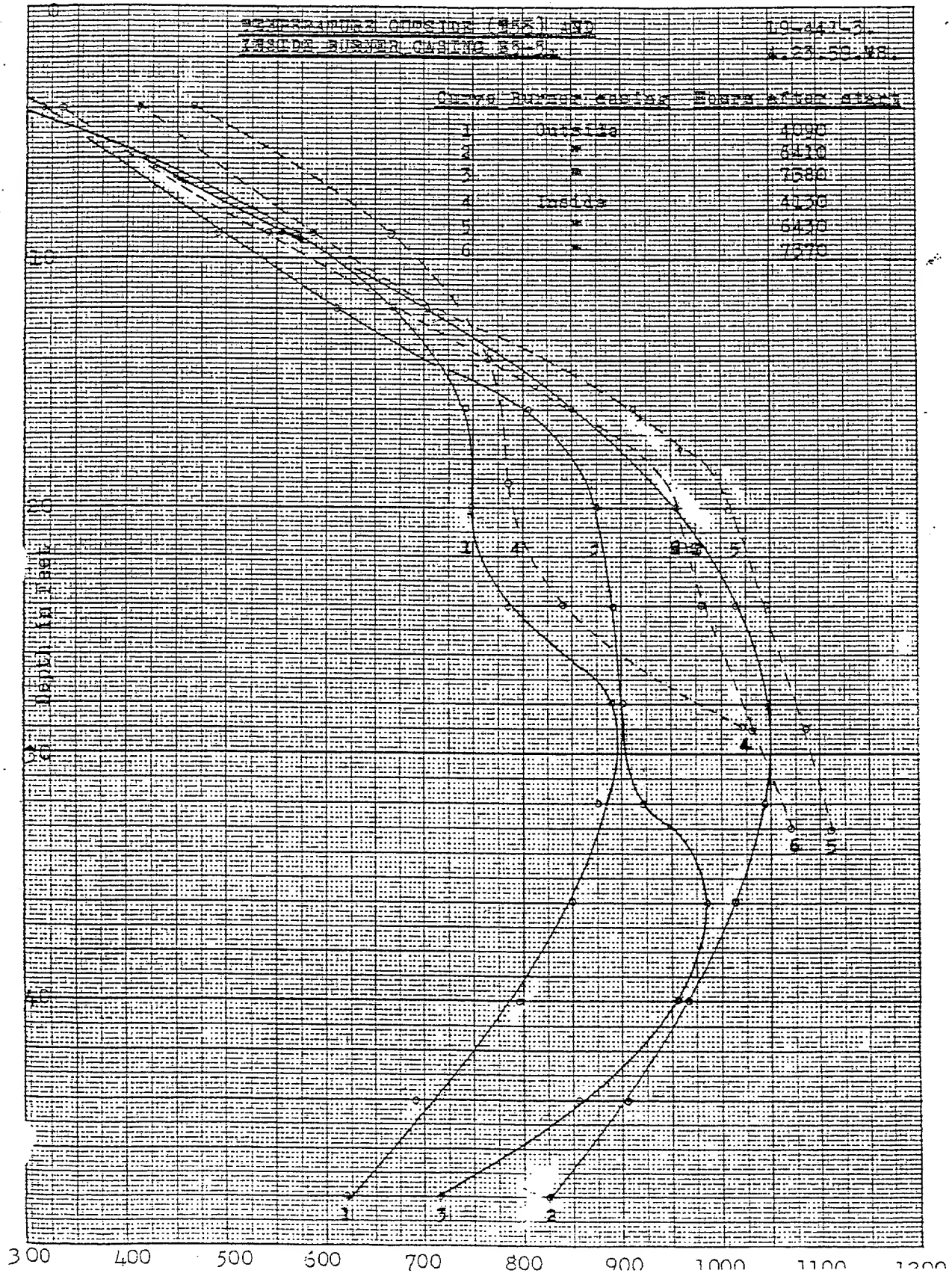


Figure 42

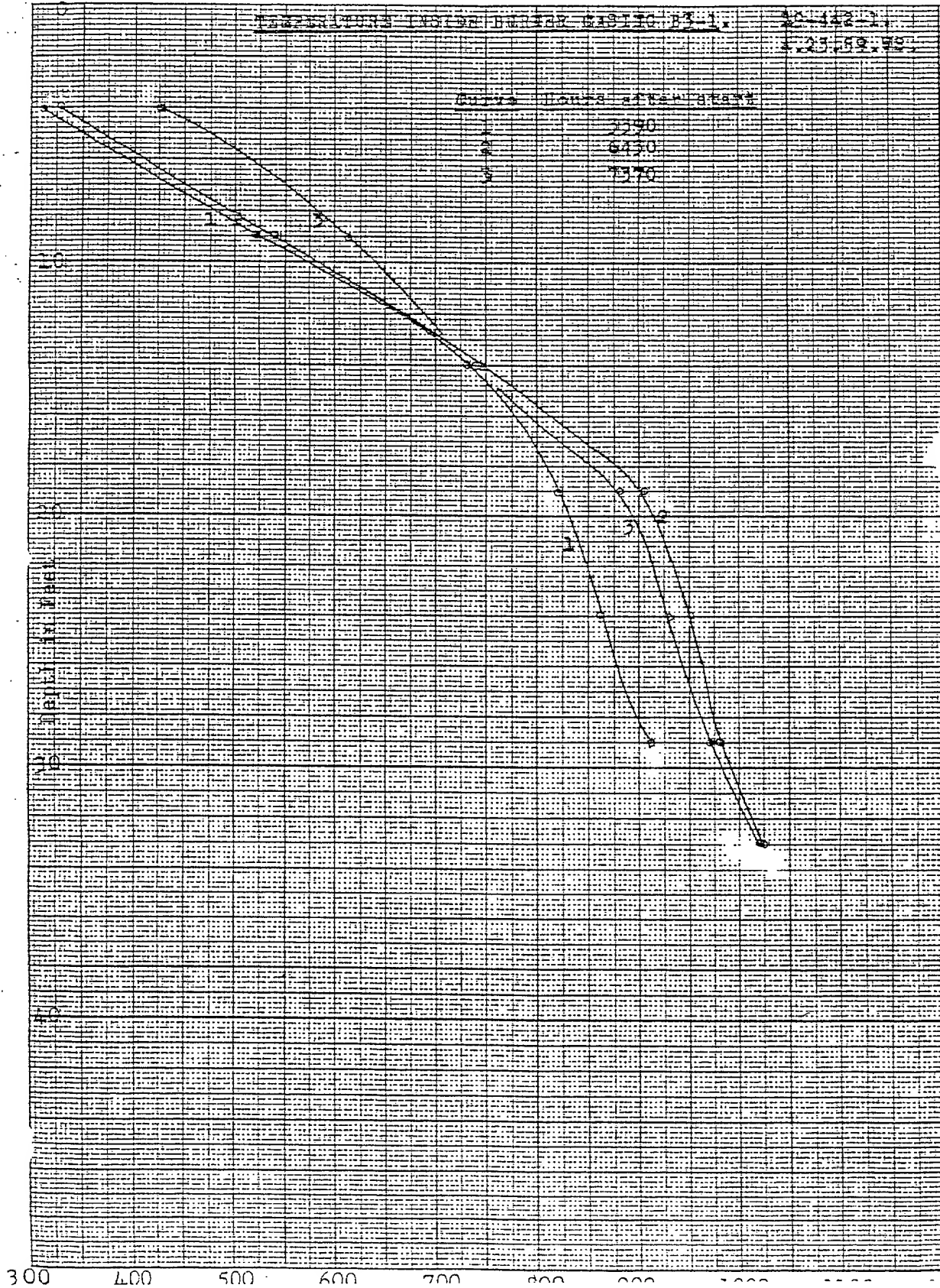


Figure 43

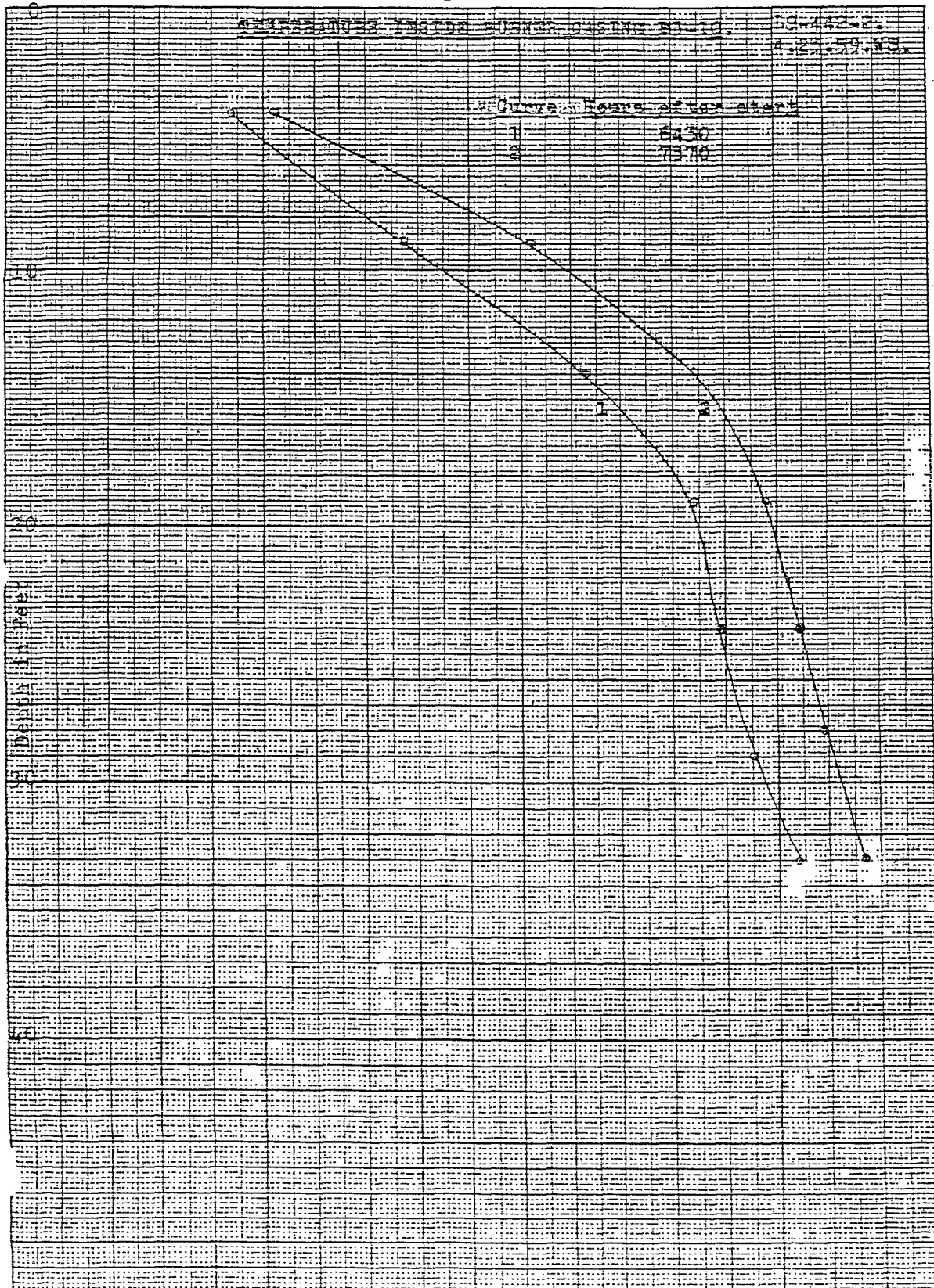


Figure 44

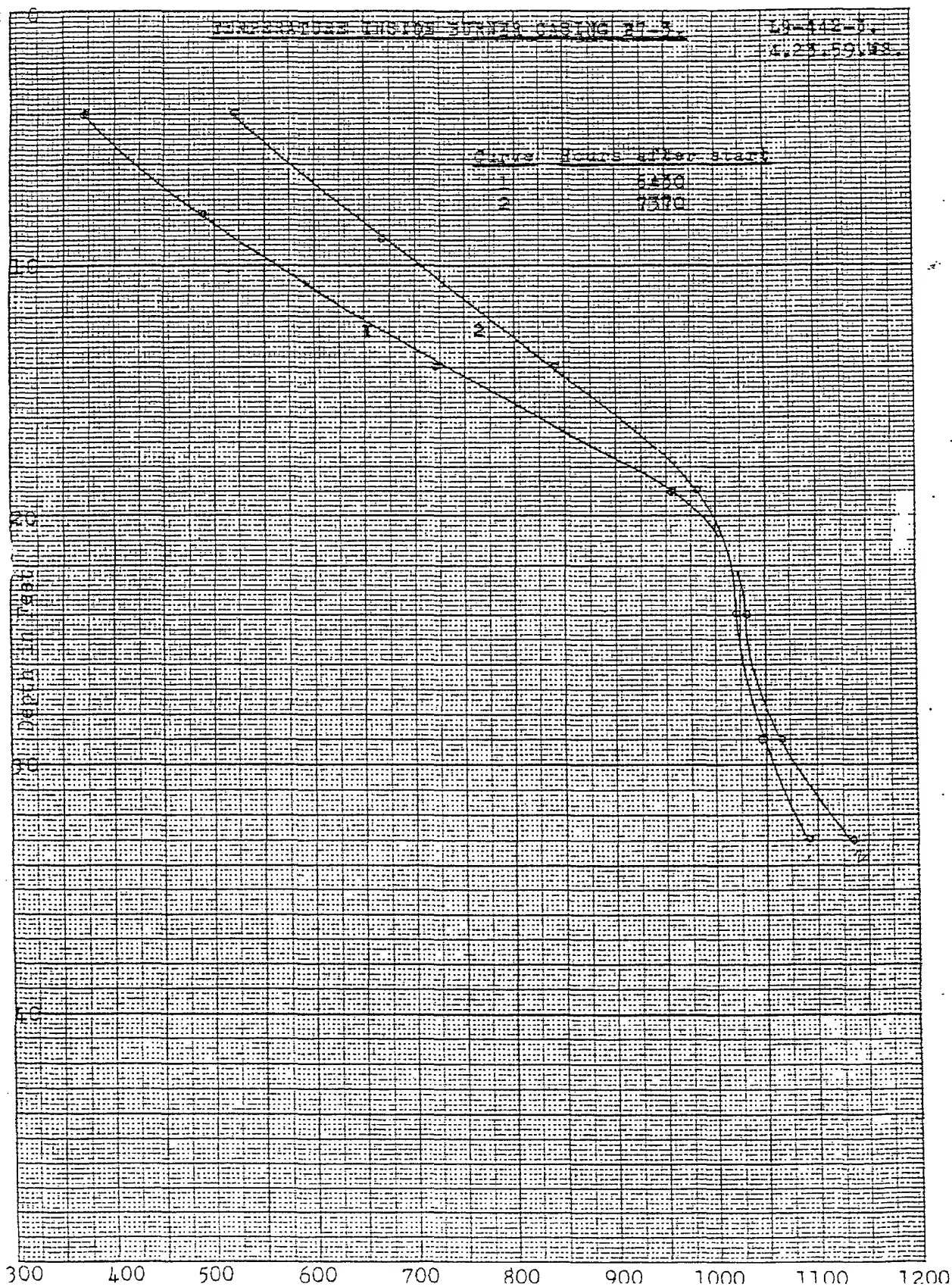


Figure 15

TEMPERATURE INSIDE BURNER CASING BTU/LB

NO. 412-4.
1.25.58.85.

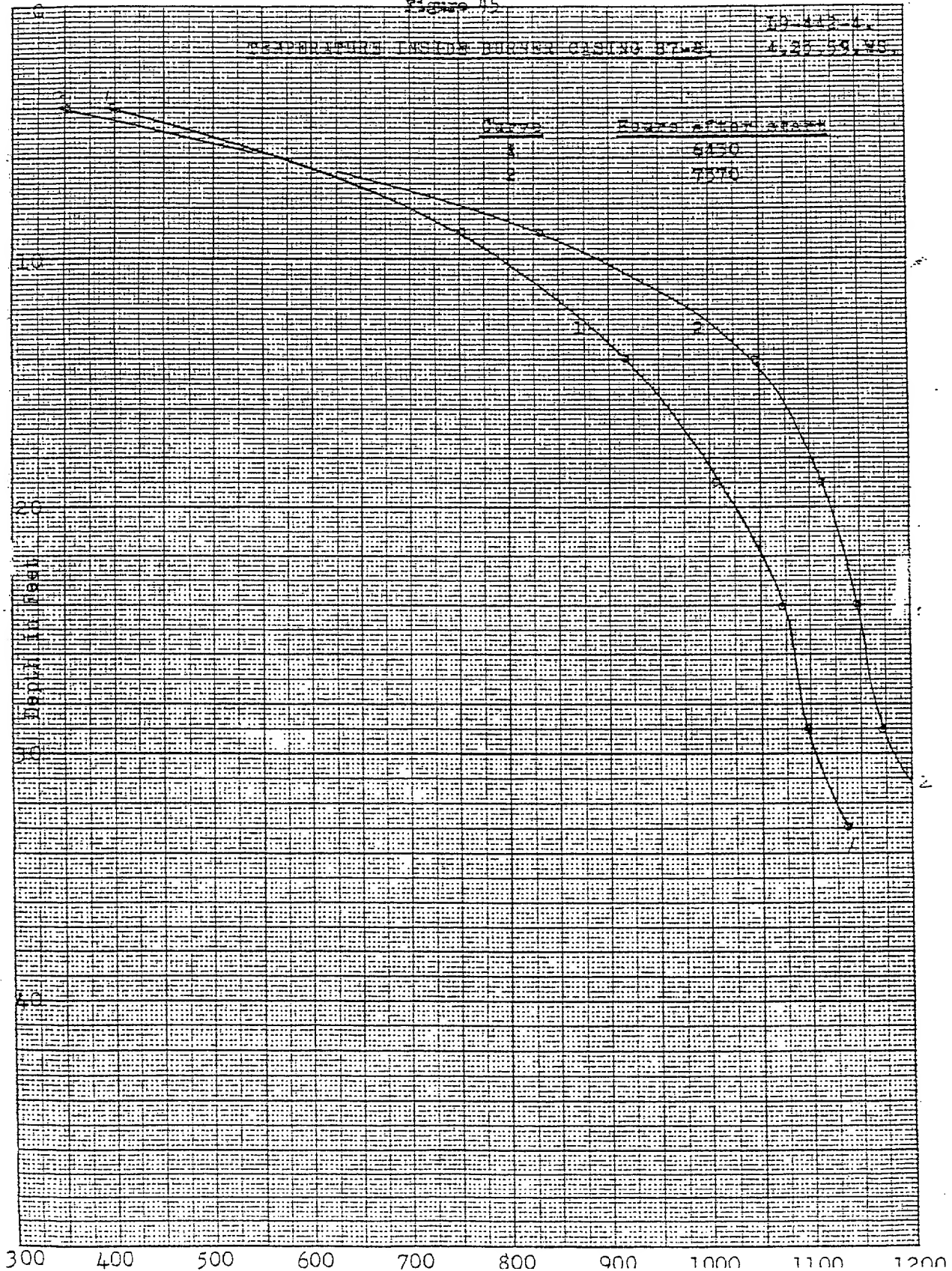


Figure 16

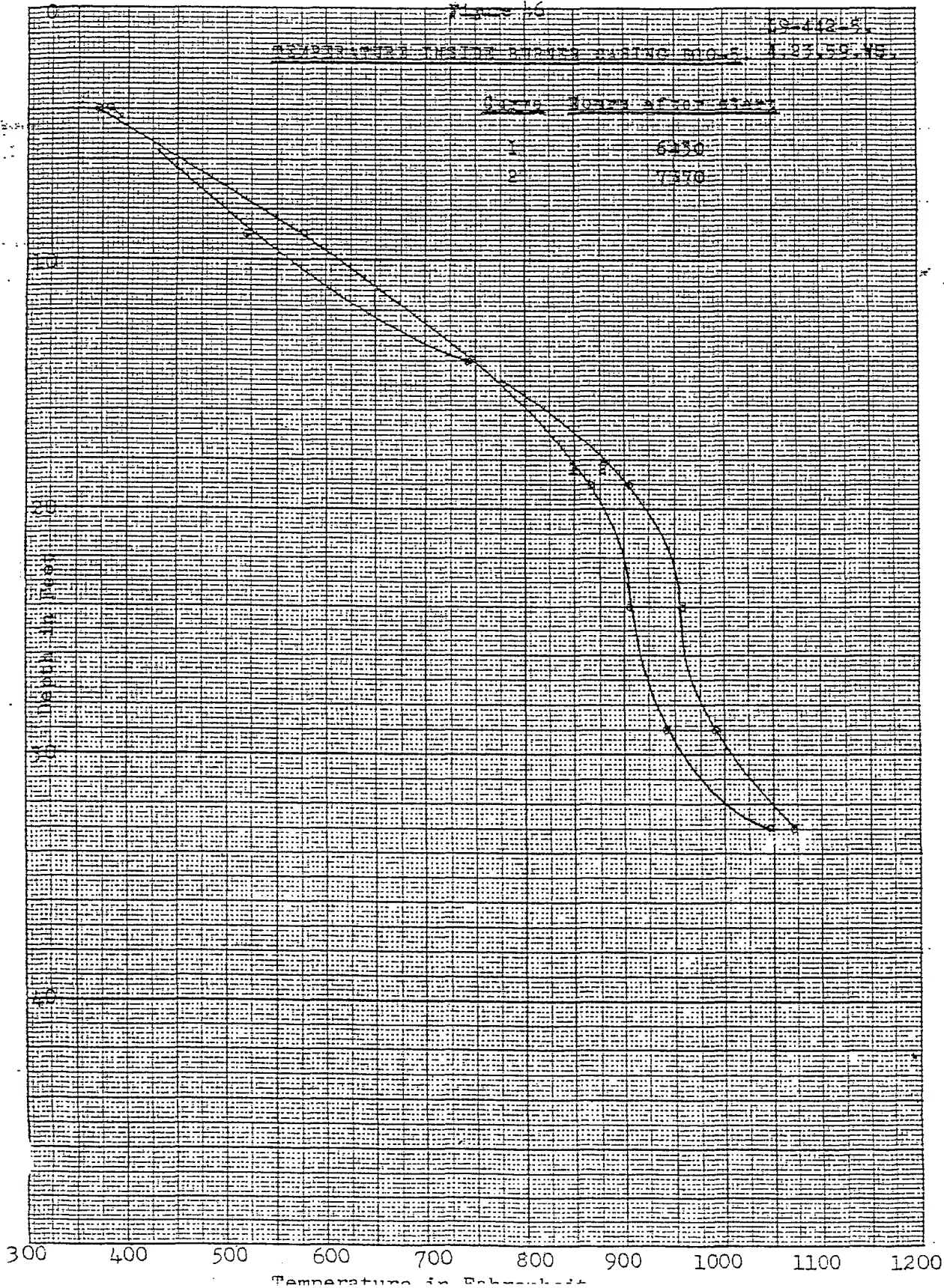
10-102-5

ASPHALT-CEMENT TESTS DURING NO.

1 27 50 45

TIME AFTER START

1	6250
2	7370



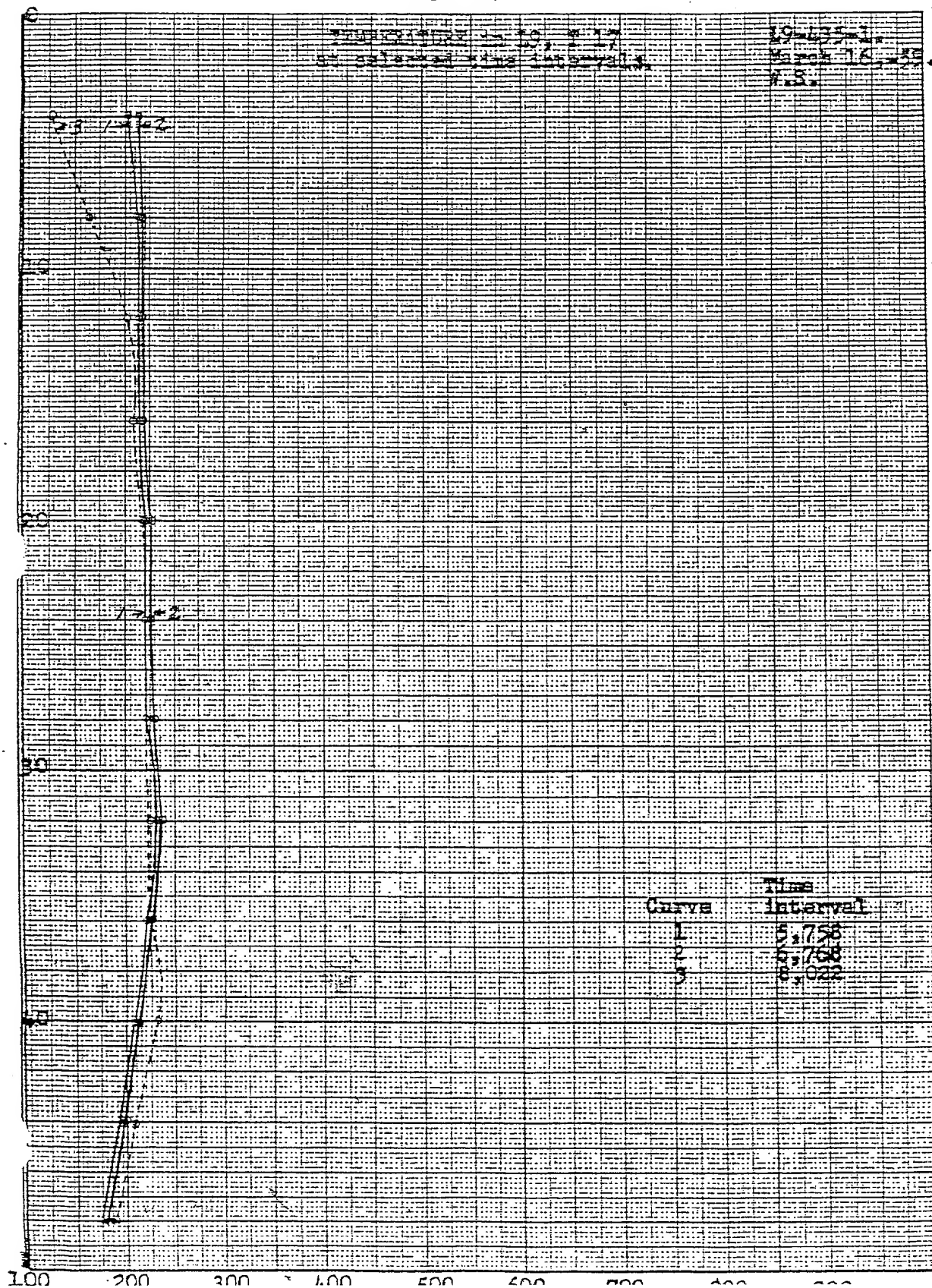


Figure 48

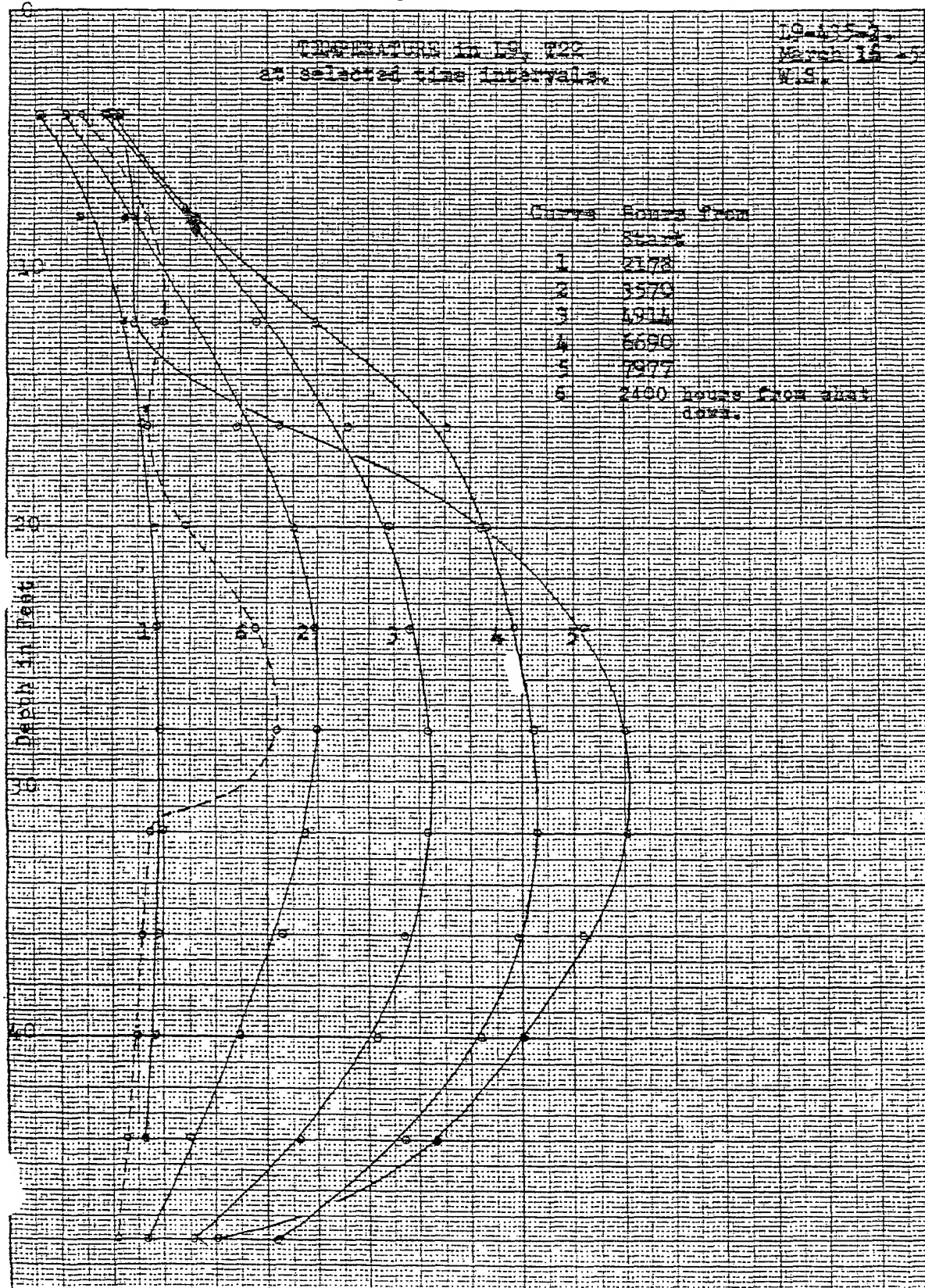


Figure 10

TEMPERATURES in IS, 921
at selected time intervals.

IC-435-3
March 14, 1951
W.S.

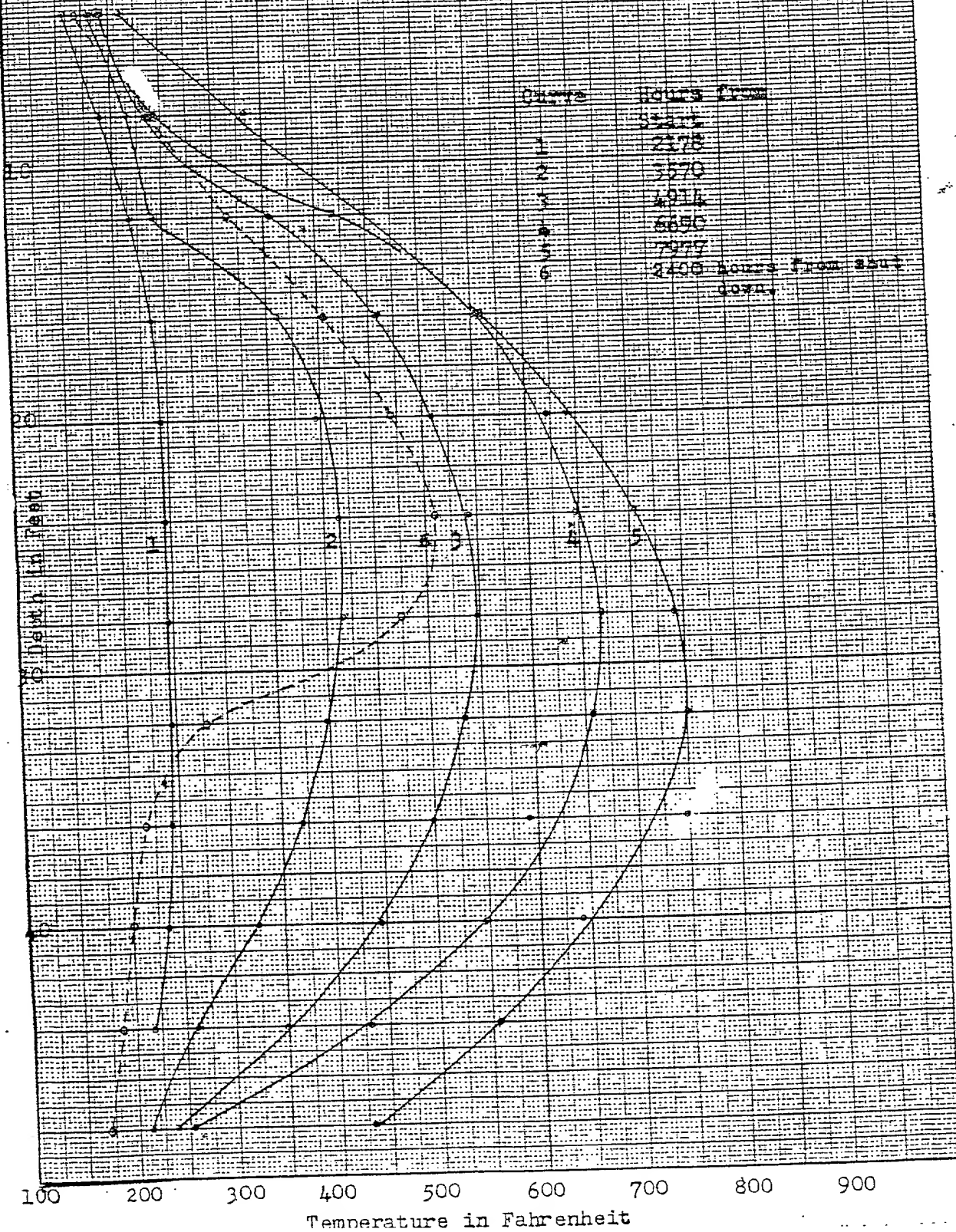
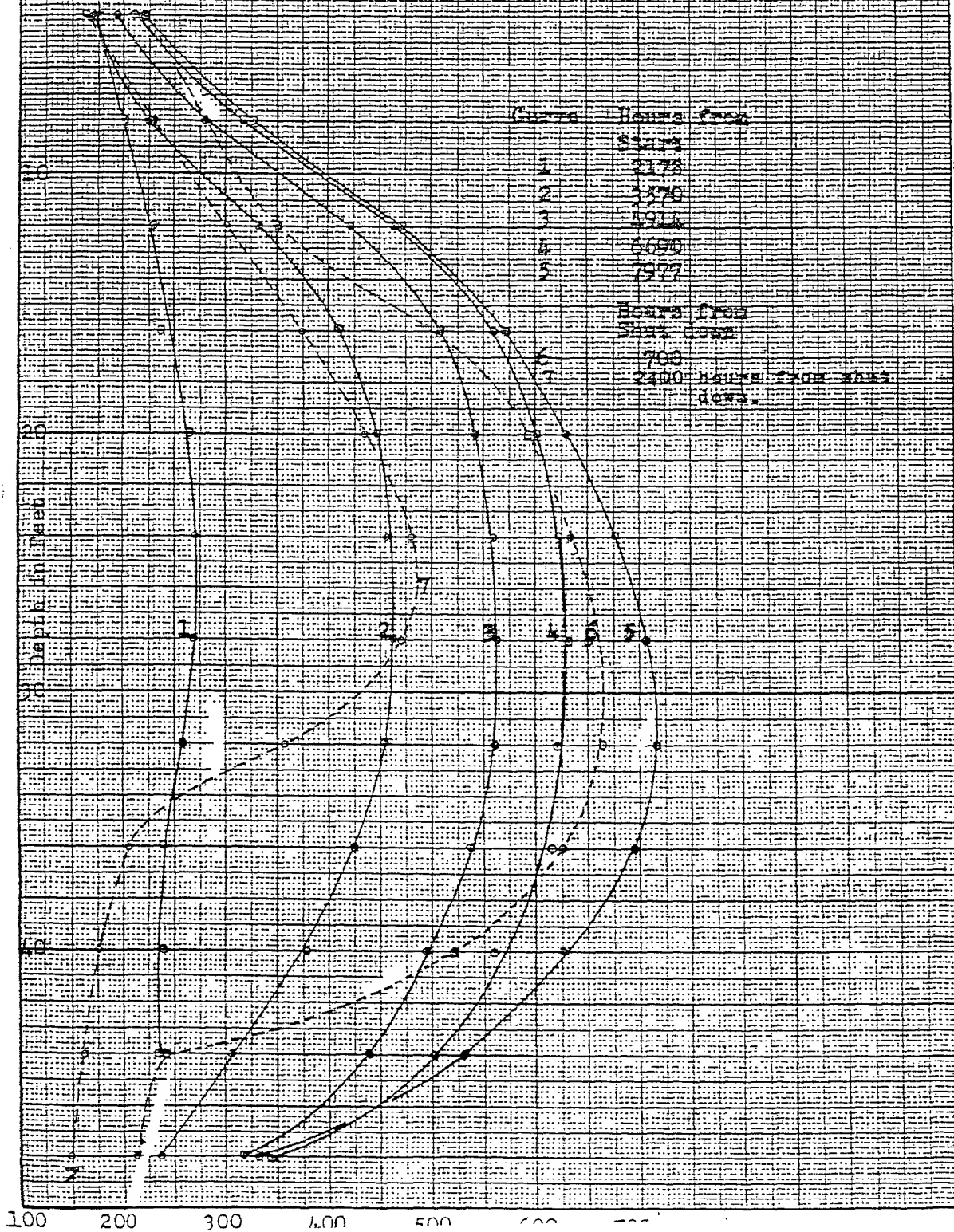


Figure 50

TEMPERATURE IN 18, 728
at selected time intervals.

10-435-
March 18, 1950
V.S.



TEMPERATURE in 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 790, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000, 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1080, 1090, 1100, 1110, 1120, 1130, 1140, 1150, 1160, 1170, 1180, 1190, 1200, 1210, 1220, 1230, 1240, 1250, 1260, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1340, 1350, 1360, 1370, 1380, 1390, 1400, 1410, 1420, 1430, 1440, 1450, 1460, 1470, 1480, 1490, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570, 1580, 1590, 1600, 1610, 1620, 1630, 1640, 1650, 1660, 1670, 1680, 1690, 1700, 1710, 1720, 1730, 1740, 1750, 1760, 1770, 1780, 1790, 1800, 1810, 1820, 1830, 1840, 1850, 1860, 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980, 1990, 2000, 2010, 2020, 2030, 2040, 2050, 2060, 2070, 2080, 2090, 2100, 2110, 2120, 2130, 2140, 2150, 2160, 2170, 2180, 2190, 2200, 2210, 2220, 2230, 2240, 2250, 2260, 2270, 2280, 2290, 2300, 2310, 2320, 2330, 2340, 2350, 2360, 2370, 2380, 2390, 2400, 2410, 2420, 2430, 2440, 2450, 2460, 2470, 2480, 2490, 2500, 2510, 2520, 2530, 2540, 2550, 2560, 2570, 2580, 2590, 2600, 2610, 2620, 2630, 2640, 2650, 2660, 2670, 2680, 2690, 2700, 2710, 2720, 2730, 2740, 2750, 2760, 2770, 2780, 2790, 2800, 2810, 2820, 2830, 2840, 2850, 2860, 2870, 2880, 2890, 2900, 2910, 2920, 2930, 2940, 2950, 2960, 2970, 2980, 2990, 3000, 3010, 3020, 3030, 3040, 3050, 3060, 3070, 3080, 3090, 3100, 3110, 3120, 3130, 3140, 3150, 3160, 3170, 3180, 3190, 3200, 3210, 3220, 3230, 3240, 3250, 3260, 3270, 3280, 3290, 3300, 3310, 3320, 3330, 3340, 3350, 3360, 3370, 3380, 3390, 3400, 3410, 3420, 3430, 3440, 3450, 3460, 3470, 3480, 3490, 3500, 3510, 3520, 3530, 3540, 3550, 3560, 3570, 3580, 3590, 3600, 3610, 3620, 3630, 3640, 3650, 3660, 3670, 3680, 3690, 3700, 3710, 3720, 3730, 3740, 3750, 3760, 3770, 3780, 3790, 3800, 3810, 3820, 3830, 3840, 3850, 3860, 3870, 3880, 3890, 3900, 3910, 3920, 3930, 3940, 3950, 3960, 3970, 3980, 3990, 4000, 4010, 4020, 4030, 4040, 4050, 4060, 4070, 4080, 4090, 4100, 4110, 4120, 4130, 4140, 4150, 4160, 4170, 4180, 4190, 4200, 4210, 4220, 4230, 4240, 4250, 4260, 4270, 4280, 4290, 4300, 4310, 4320, 4330, 4340, 4350, 4360, 4370, 4380, 4390, 4400, 4410, 4420, 4430, 4440, 4450, 4460, 4470, 4480, 4490, 4500, 4510, 4520, 4530, 4540, 4550, 4560, 4570, 4580, 4590, 4600, 4610, 4620, 4630, 4640, 4650, 4660, 4670, 4680, 4690, 4700, 4710, 4720, 4730, 4740, 4750, 4760, 4770, 4780, 4790, 4800, 4810, 4820, 4830, 4840, 4850, 4860, 4870, 4880, 4890, 4900, 4910, 4920, 4930, 4940, 4950, 4960, 4970, 4980, 4990, 5000, 5010, 5020, 5030, 5040, 5050, 5060, 5070, 5080, 5090, 5100, 5110, 5120, 5130, 5140, 5150, 5160, 5170, 5180, 5190, 5200, 5210, 5220, 5230, 5240, 5250, 5260, 5270, 5280, 5290, 5300, 5310, 5320, 5330, 5340, 5350, 5360, 5370, 5380, 5390, 5400, 5410, 5420, 5430, 5440, 5450, 5460, 5470, 5480, 5490, 5500, 5510, 5520, 5530, 5540, 5550, 5560, 5570, 5580, 5590, 5600, 5610, 5620, 5630, 5640, 5650, 5660, 5670, 5680, 5690, 5700, 5710, 5720, 5730, 5740, 5750, 5760, 5770, 5780, 5790, 5800, 5810, 5820, 5830, 5840, 5850, 5860, 5870, 5880, 5890, 5900, 5910, 5920, 5930, 5940, 5950, 5960, 5970, 5980, 5990, 6000, 6010, 6020, 6030, 6040, 6050, 6060, 6070, 6080, 6090, 6100, 6110, 6120, 6130, 6140, 6150, 6160, 6170, 6180, 6190, 6200, 6210, 6220, 6230, 6240, 6250, 6260, 6270, 6280, 6290, 6300, 6310, 6320, 6330, 6340, 6350, 6360, 6370, 6380, 6390, 6400, 6410, 6420, 6430, 6440, 6450, 6460, 6470, 6480, 6490, 6500, 6510, 6520, 6530, 6540, 6550, 6560, 6570, 6580, 6590, 6600, 6610, 6620, 6630, 6640, 6650, 6660, 6670, 6680, 6690, 6700, 6710, 6720, 6730, 6740, 6750, 6760, 6770, 6780, 6790, 6800, 6810, 6820, 6830, 6840, 6850, 6860, 6870, 6880, 6890, 6900, 6910, 6920, 6930, 6940, 6950, 6960, 6970, 6980, 6990, 7000, 7010, 7020, 7030, 7040, 7050, 7060, 7070, 7080, 7090, 7100, 7110, 7120, 7130, 7140, 7150, 7160, 7170, 7180, 7190, 7200, 7210, 7220, 7230, 7240, 7250, 7260, 7270, 7280, 7290, 7300, 7310, 7320, 7330, 7340, 7350, 7360, 7370, 7380, 7390, 7400, 7410, 7420, 7430, 7440, 7450, 7460, 7470, 7480, 7490, 7500, 7510, 7520, 7530, 7540, 7550, 7560, 7570, 7580, 7590, 7600, 7610, 7620, 7630, 7640, 7650, 7660, 7670, 7680, 7690, 7700, 7710, 7720, 7730, 7740, 7750, 7760, 7770, 7780, 7790, 7800, 7810, 7820, 7830, 7840, 7850, 7860, 7870, 7880, 7890, 7900, 7910, 7920, 7930, 7940, 7950, 7960, 7970, 7980, 7990, 8000, 8010, 8020, 8030, 8040, 8050, 8060, 8070, 8080, 8090, 8100, 8110, 8120, 8130, 8140, 8150, 8160, 8170, 8180, 8190, 8200, 8210, 8220, 8230, 8240, 8250, 8260, 8270, 8280, 8290, 8300, 8310, 8320, 8330, 8340, 8350, 8360, 8370, 8380, 8390, 8400, 8410, 8420, 8430, 8440, 8450, 8460, 8470, 8480, 8490, 8500, 8510, 8520, 8530, 8540, 8550, 8560, 8570, 8580, 8590, 8600, 8610, 8620, 8630, 8640, 8650, 8660, 8670, 8680, 8690, 8700, 8710, 8720, 8730, 8740, 8750, 8760, 8770, 8780, 8790, 8800, 8810, 8820, 8830, 8840, 8850, 8860, 8870, 8880, 8890, 8900, 8910, 8920, 8930, 8940, 8950, 8960, 8970, 8980, 8990, 9000, 9010, 9020, 9030, 9040, 9050, 9060, 9070, 9080, 9090, 9100, 9110, 9120, 9130, 9140, 9150, 9160, 9170, 9180, 9190, 9200, 9210, 9220, 9230, 9240, 9250, 9260, 9270, 9280, 9290, 9300, 9310, 9320, 9330, 9340, 9350, 9360, 9370, 9380, 9390, 9400, 9410, 9420, 9430, 9440, 9450, 9460, 9470, 9480, 9490, 9500, 9510, 9520, 9530, 9540, 9550, 9560, 9570, 9580, 9590, 9600, 9610, 9620, 9630, 9640, 9650, 9660, 9670, 9680, 9690, 9700, 9710, 9720, 9730, 9740, 9750, 9760, 9770, 9780, 9790, 9800, 9810, 9820, 9830, 9840, 9850, 9860, 9870, 9880, 9890, 9900, 9910, 9920, 9930, 9940, 9950, 9960, 9970, 9980, 9990, 10000

10-15-53
March 16, 53
U.S.

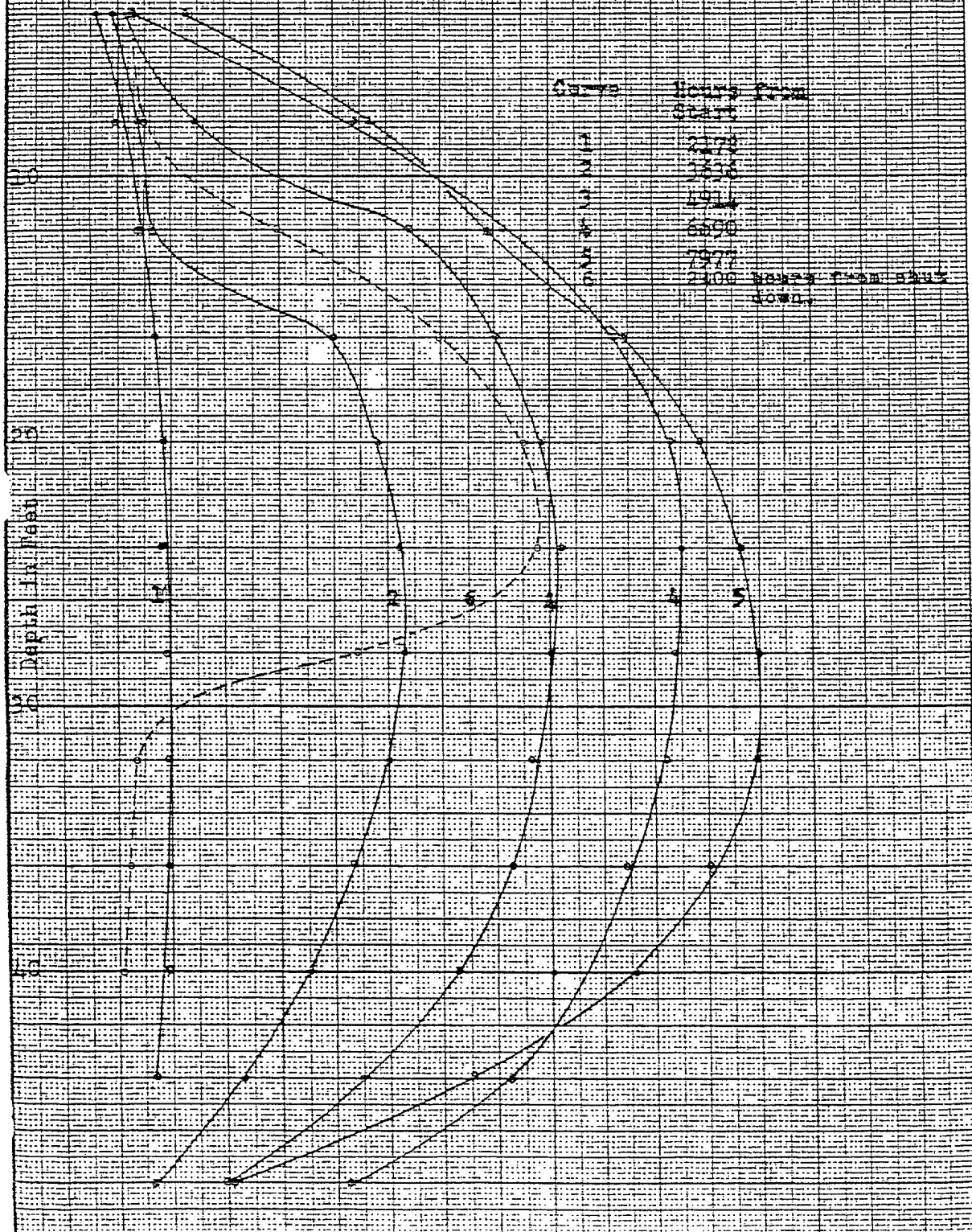


Figure 52

TEMPERATURE in L.S. T 44
at selected time intervals

19-43-6.
March 14, 1950
W.S.

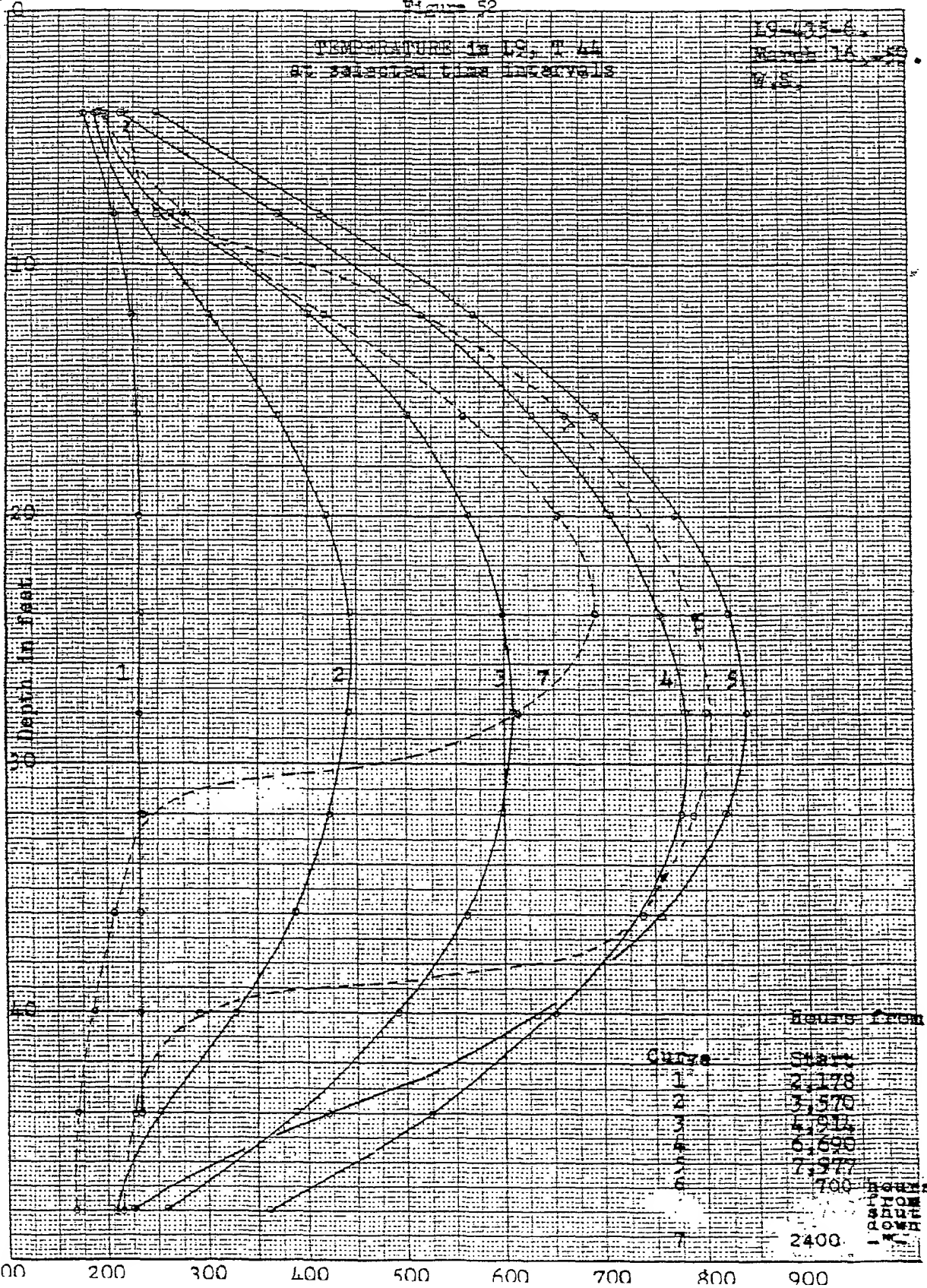


Figure 53

TEMPERATURES IN 19, 748
at selected time intervals.

19-635-7.
March 18, 59.
U.S.

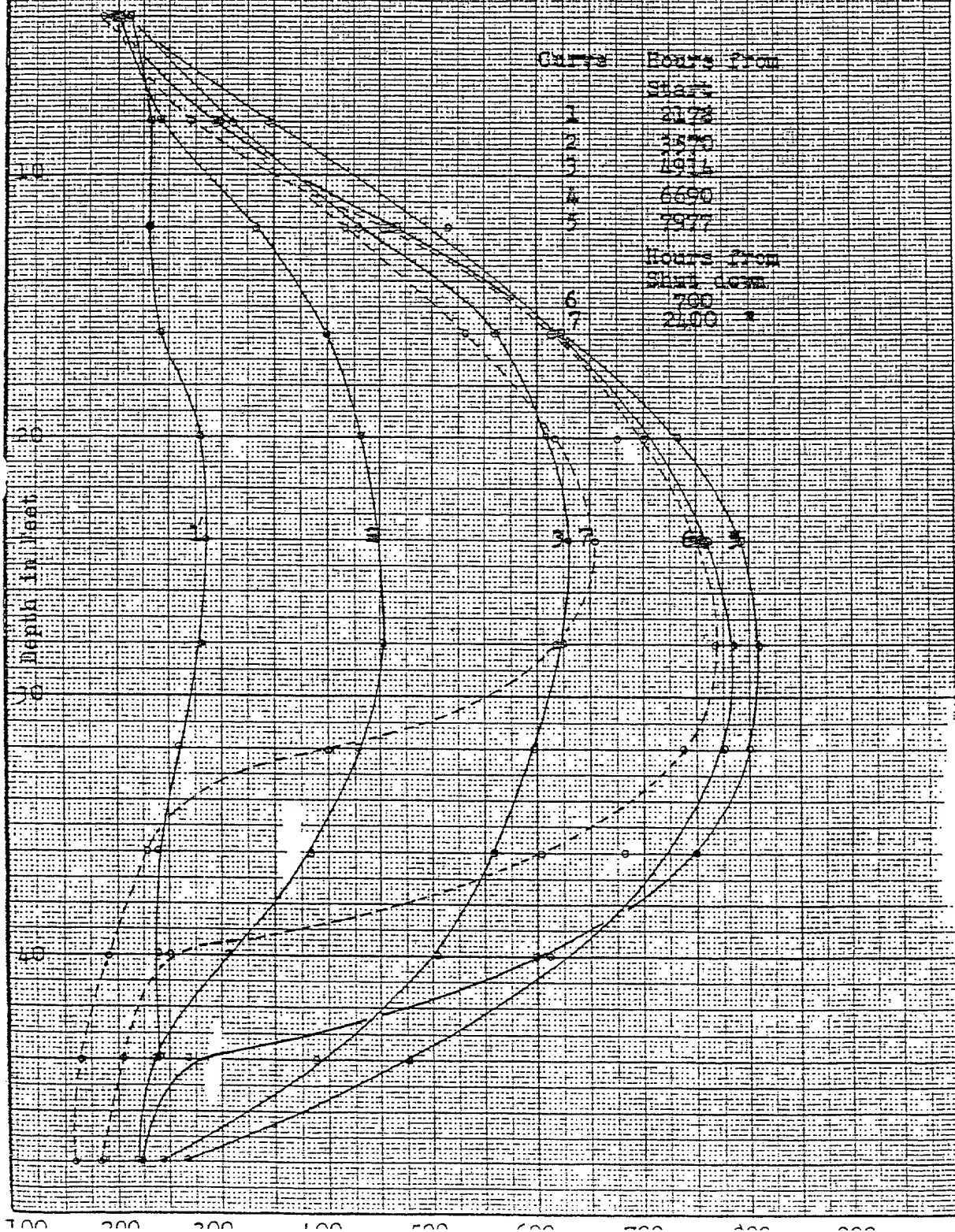


Figure 1
TEMPERATURE in 18, 7494
at selected time intervals.

19-533-1
March 16, -52
W.S.

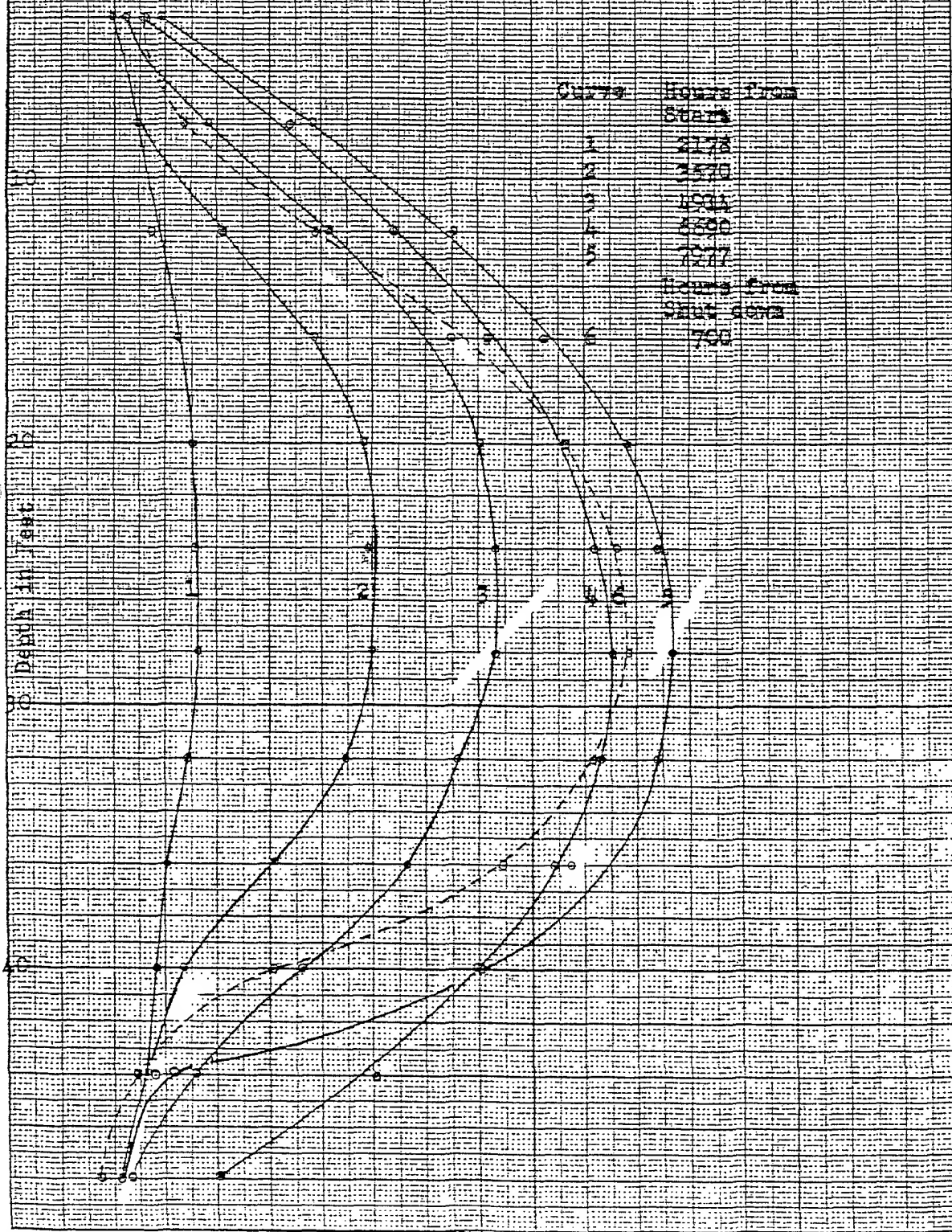


Figure 55

TEMPERATURE IN 10, 20, 30,
at selected time intervals.

10-113-9.
March 16, 30.
W.S.

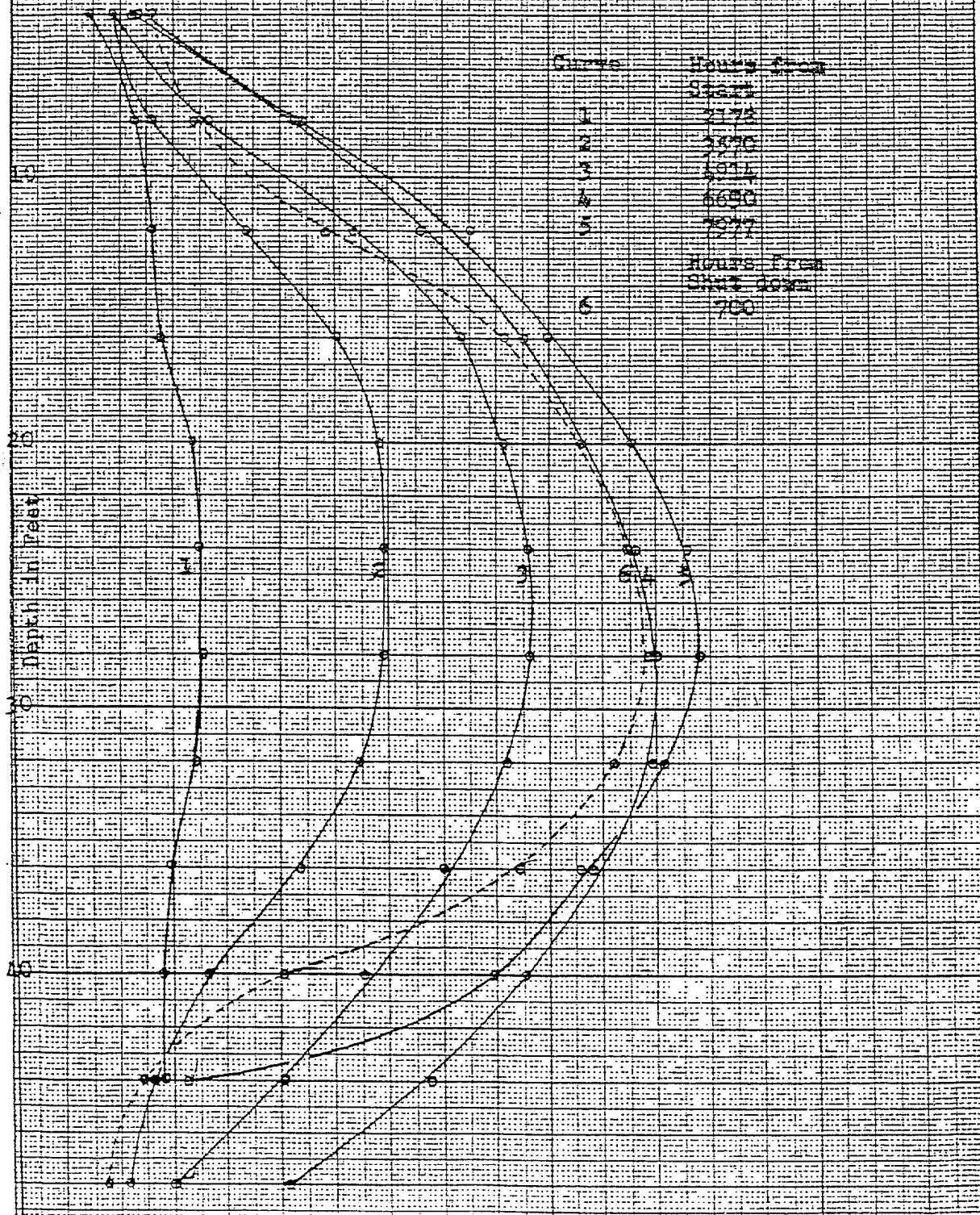
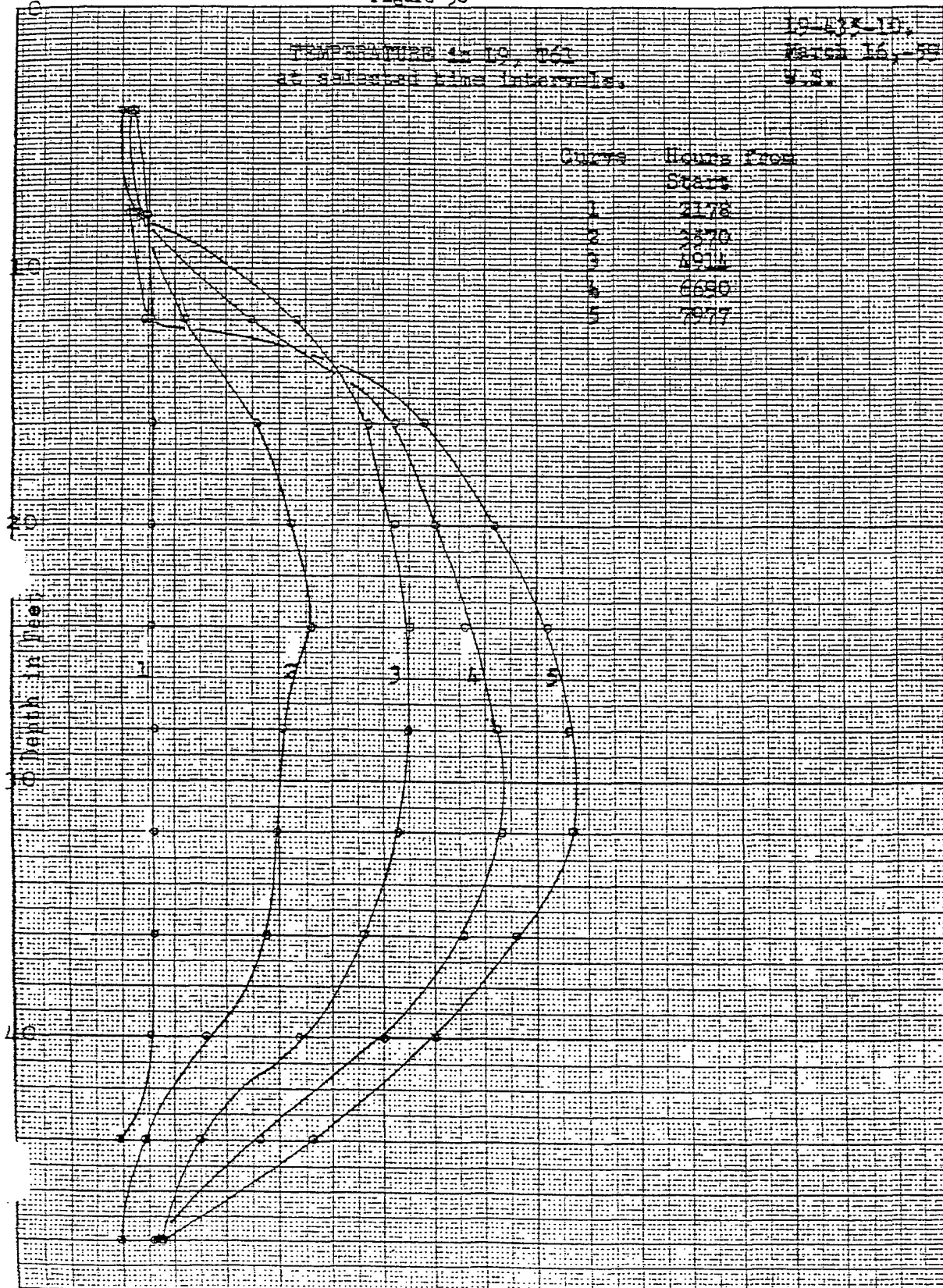


Figure 56



EUGENE DIETZEN CO.
PRINTED IN U. S. A.

NO. 340-A.M. DIETZEN GRAPH PAI
MILLIMETER

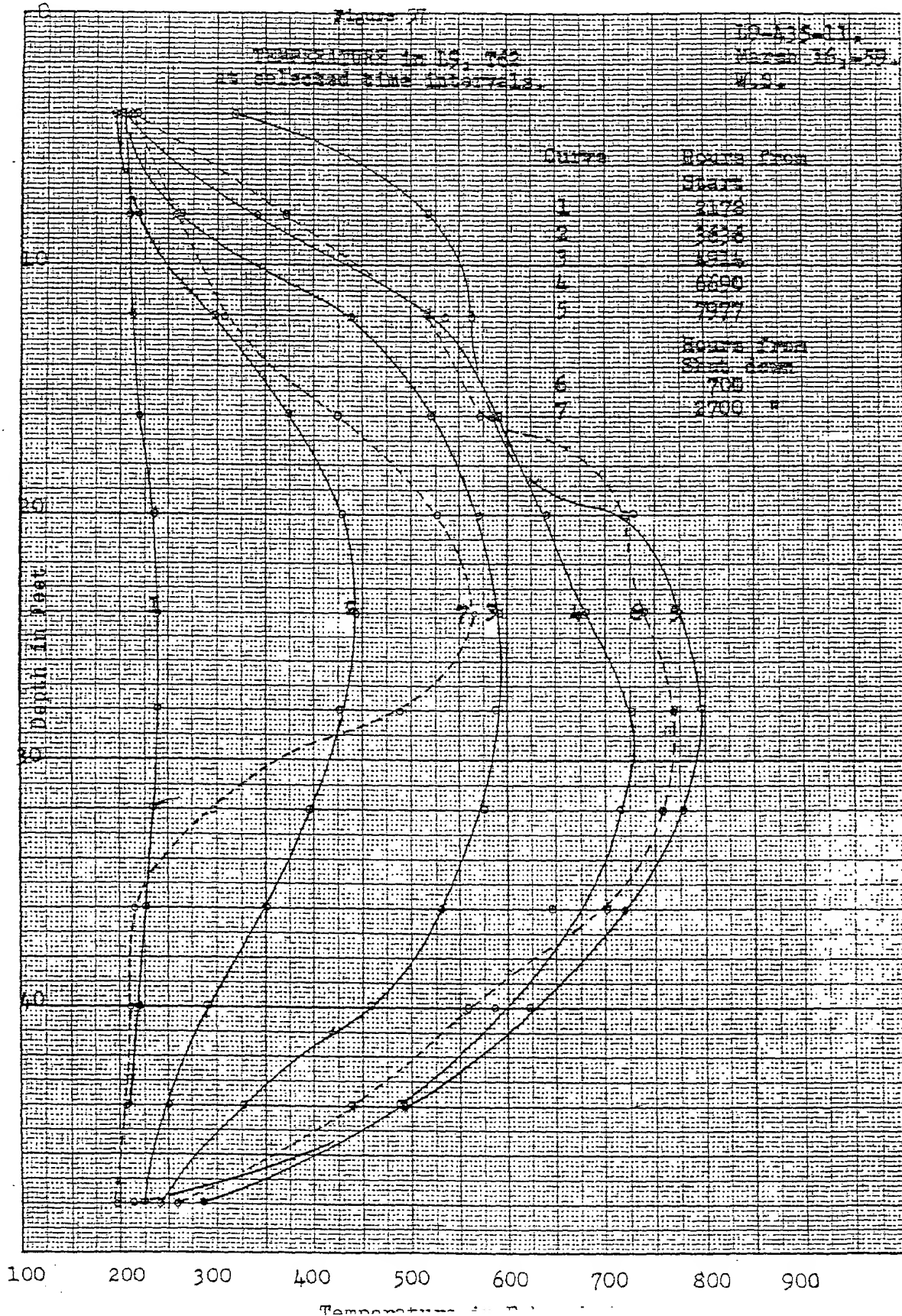


Figure 58

TEMPERATURE IN °C, °F
at selected time intervals.

10-105-12
March 14, 1955
U.S.

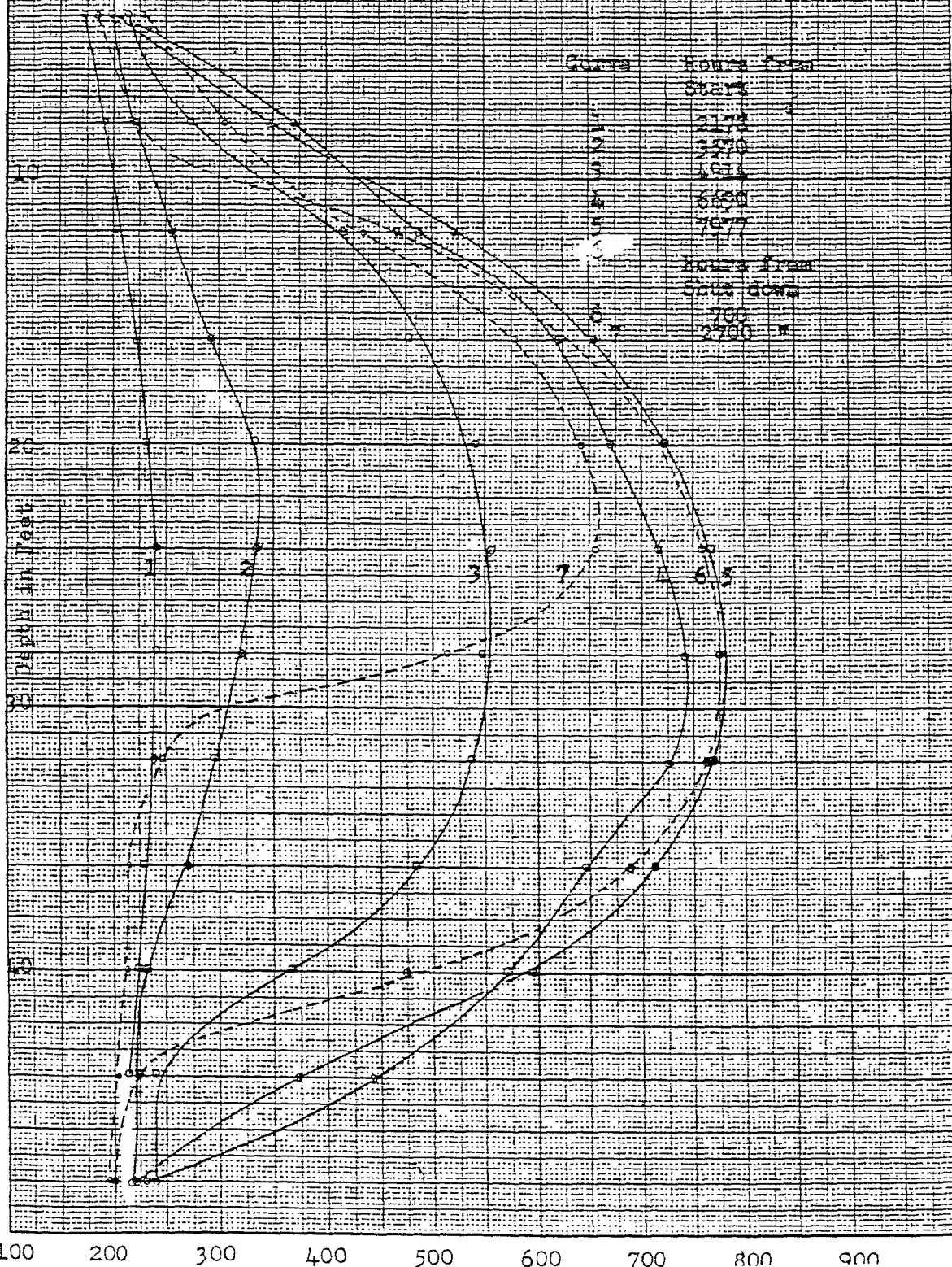


Figure 59

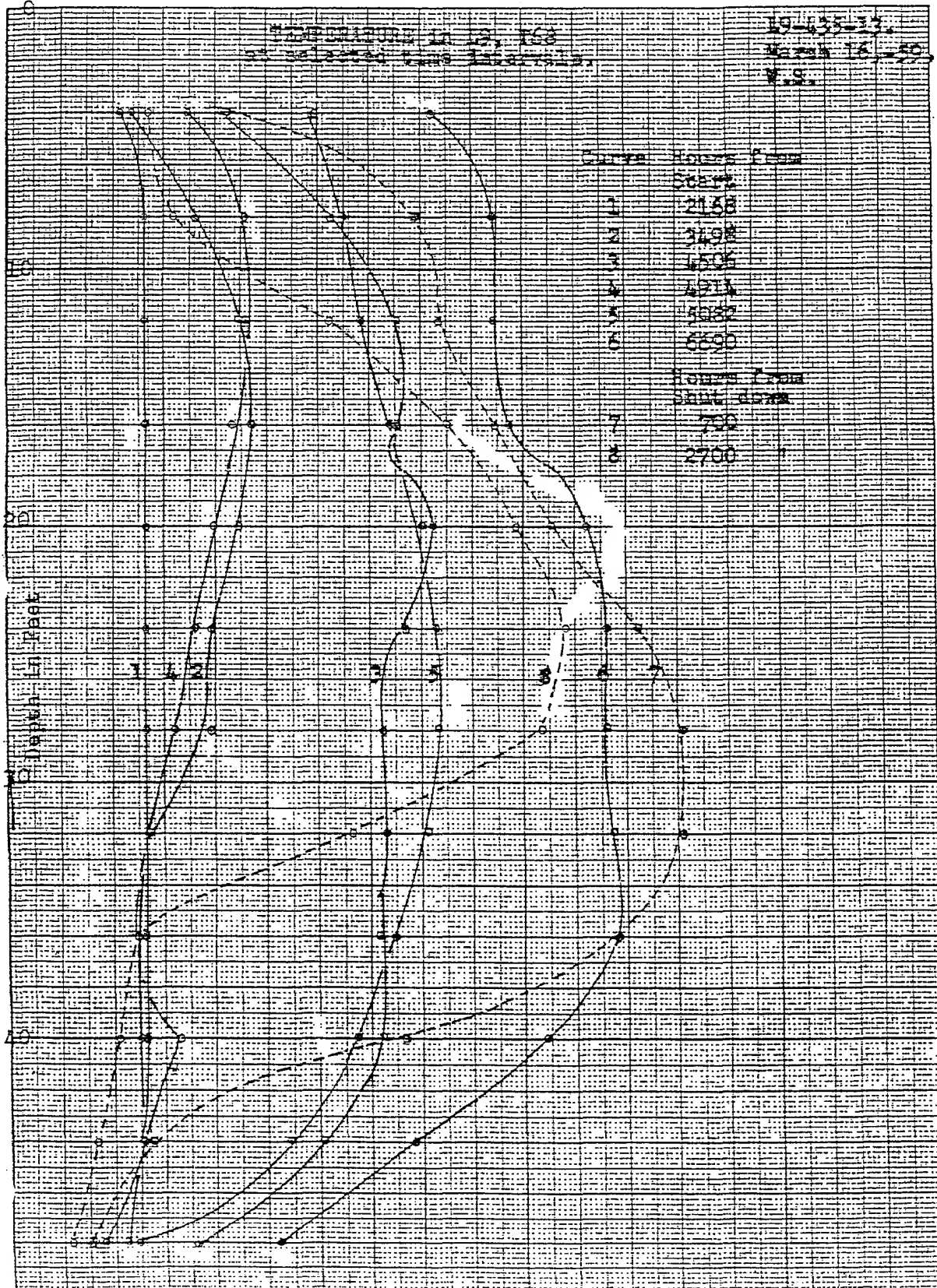


Figure 60

TEMPERATURE in 19. TTI
at selected time intervals.

CG-435-14.
March 16, 39.
W.S.

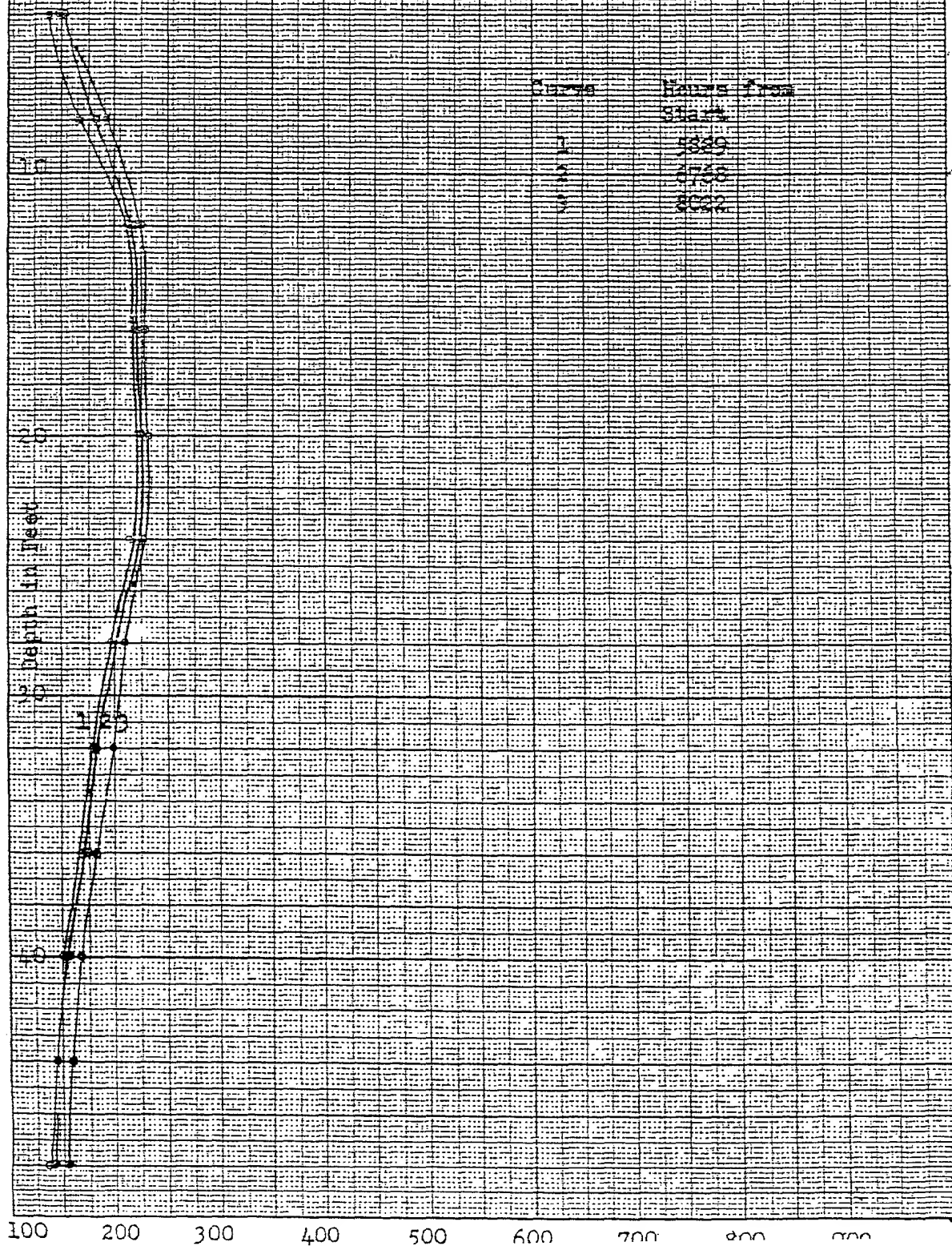


Figure 61

TEMPERATURE IN 19, F10A
at selected time intervals

10-205-13
March 16, 1955
U.S.

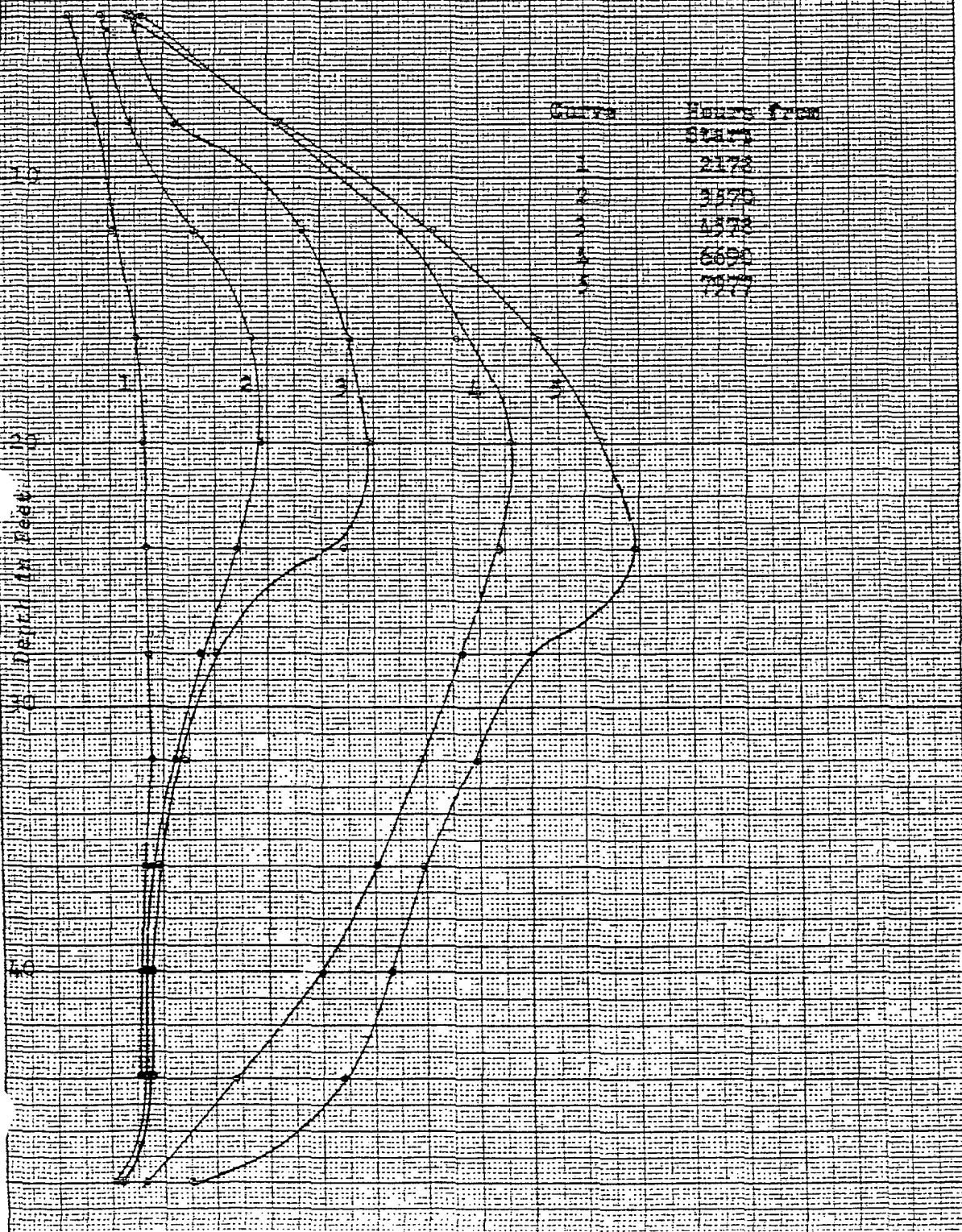


Figure 62

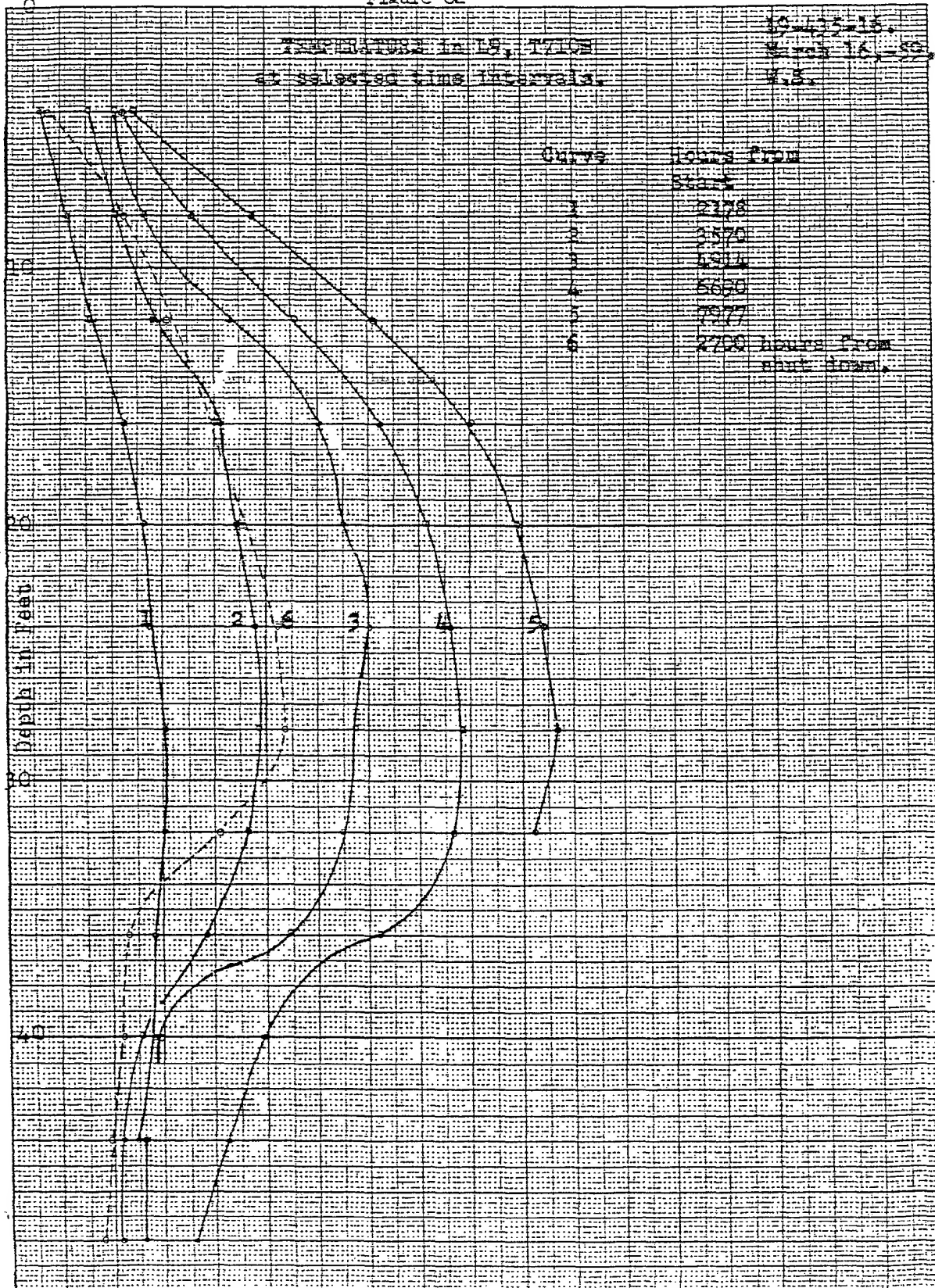


Figure 63

TEMPERATURE IN °C, 27100
at selected time intervals.

19-03-47.
March 12, 1948.
W.S.

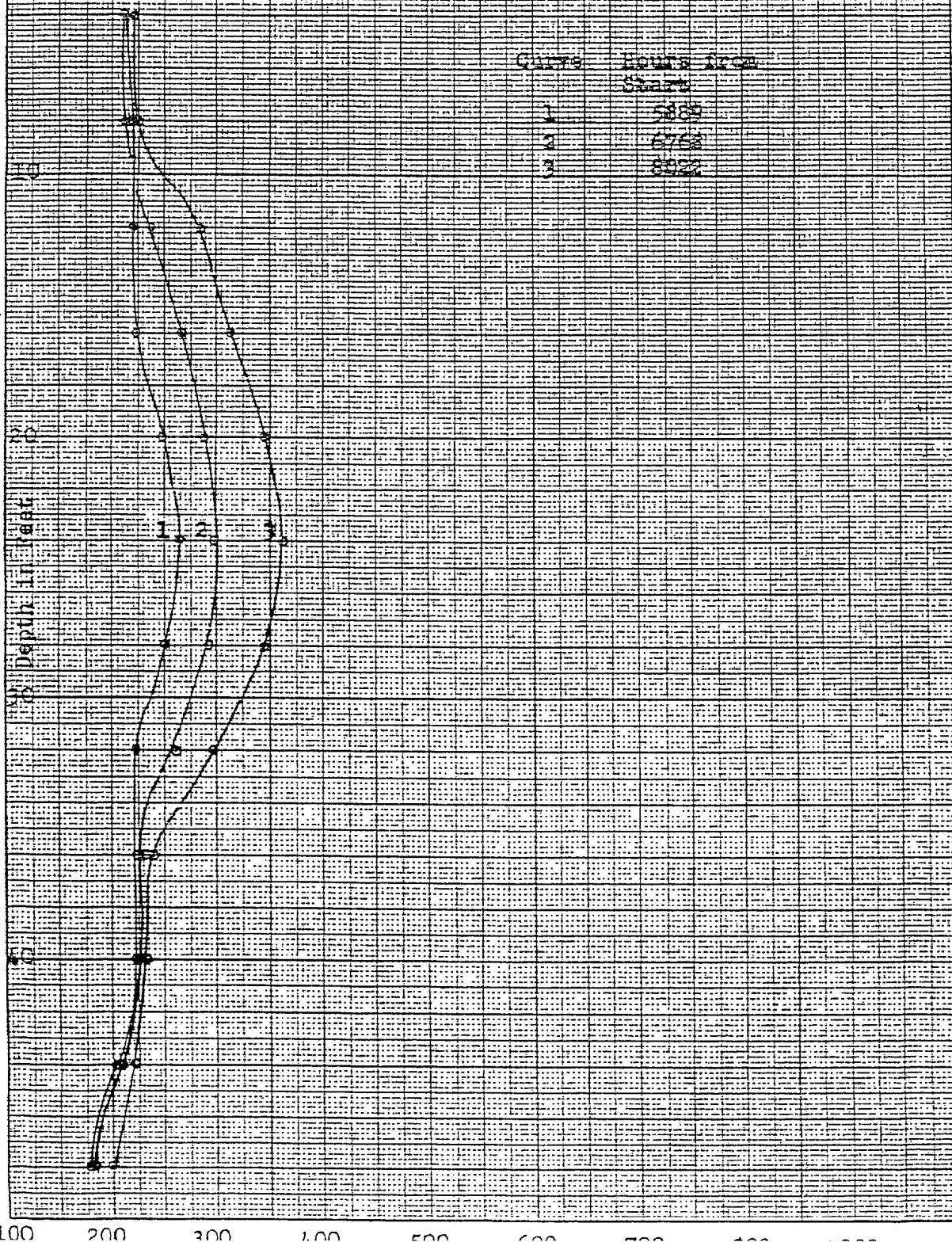


Figure 6

TEMPERATURE IN °C, °F
at selected time intervals

10-435-18.
March 16, 59
U.S.

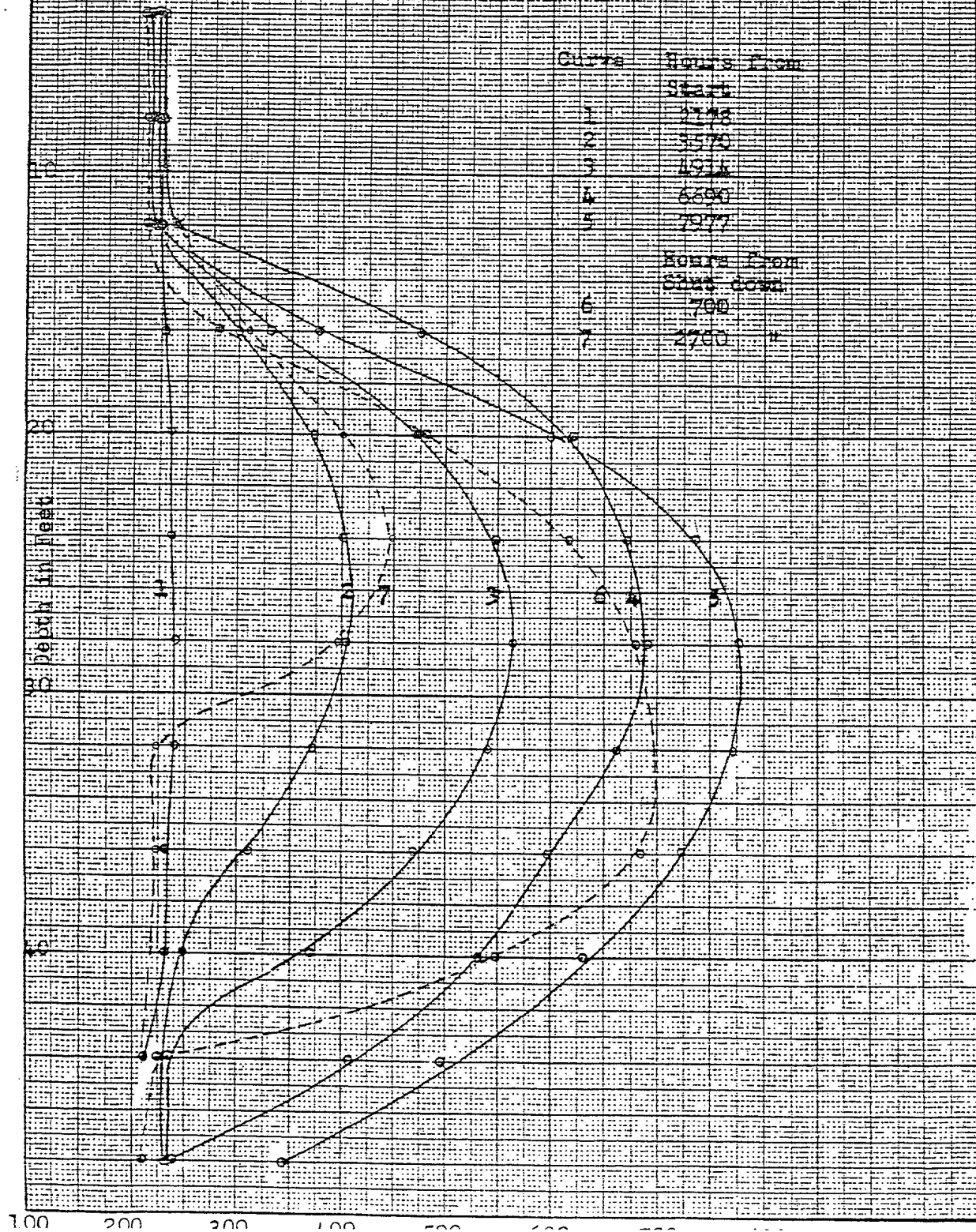


Figure 65
TEMPERATURE IN °C. vs
at selected time intervals.

10-18-19.
March 16, 1919.
S.S.

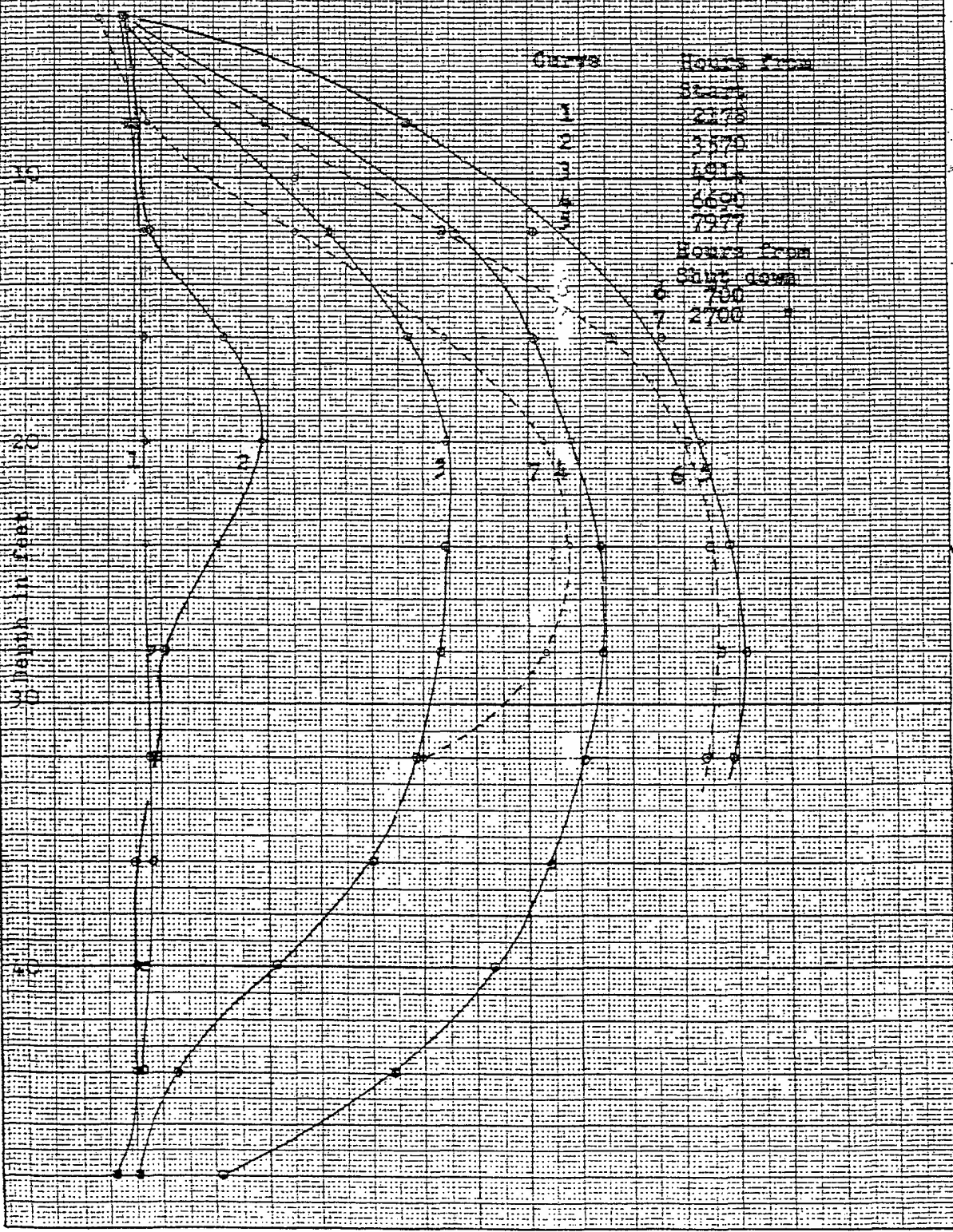


Figure 66
TEMPERATURE IN 10, 7102
at selected time intervals.

10-434-20.
March 16, 58.
W.S.

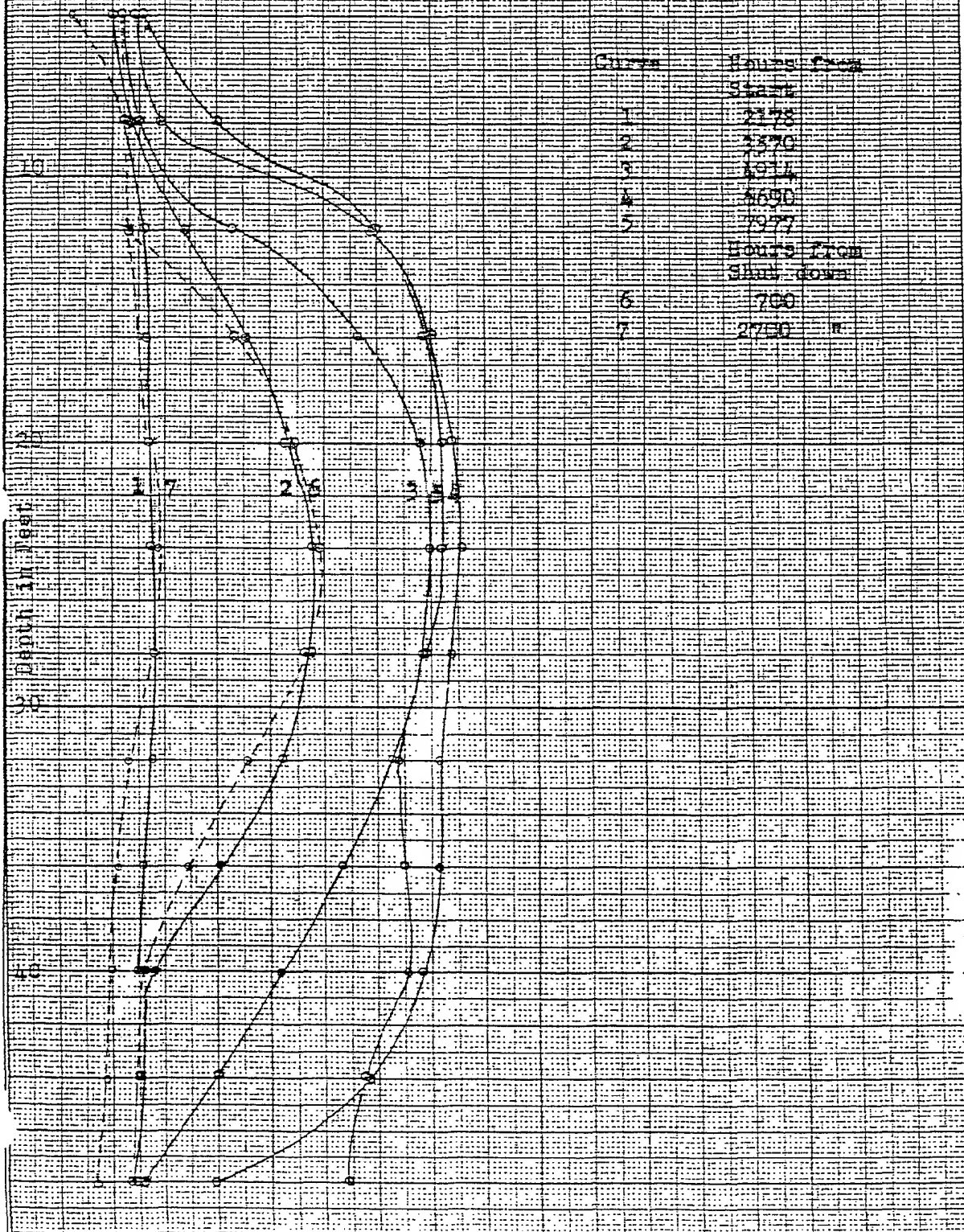


Figure 6
 THERMISTOR LOG, T106
 at selected time intervals.

IS-35-27
 March 16, 59
 W.S.

Curve	Hours from Start
1	5738
2	6768
3	8022

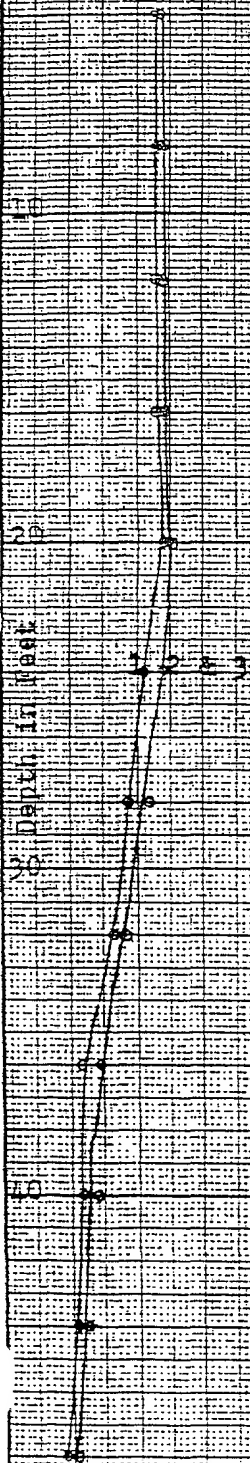
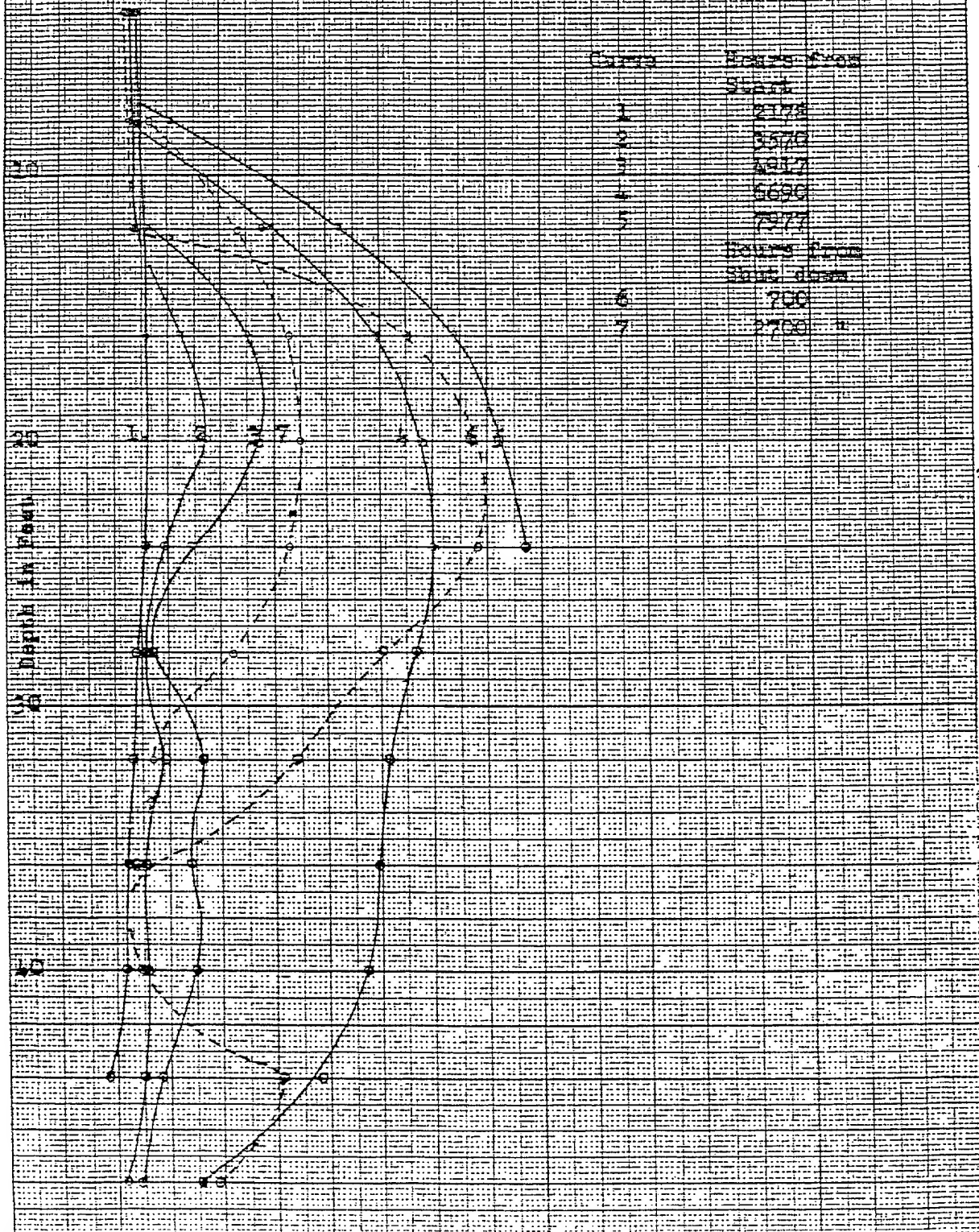


Figure 68

TEMPERATURE IN 10' WIDE
at selected time intervals.

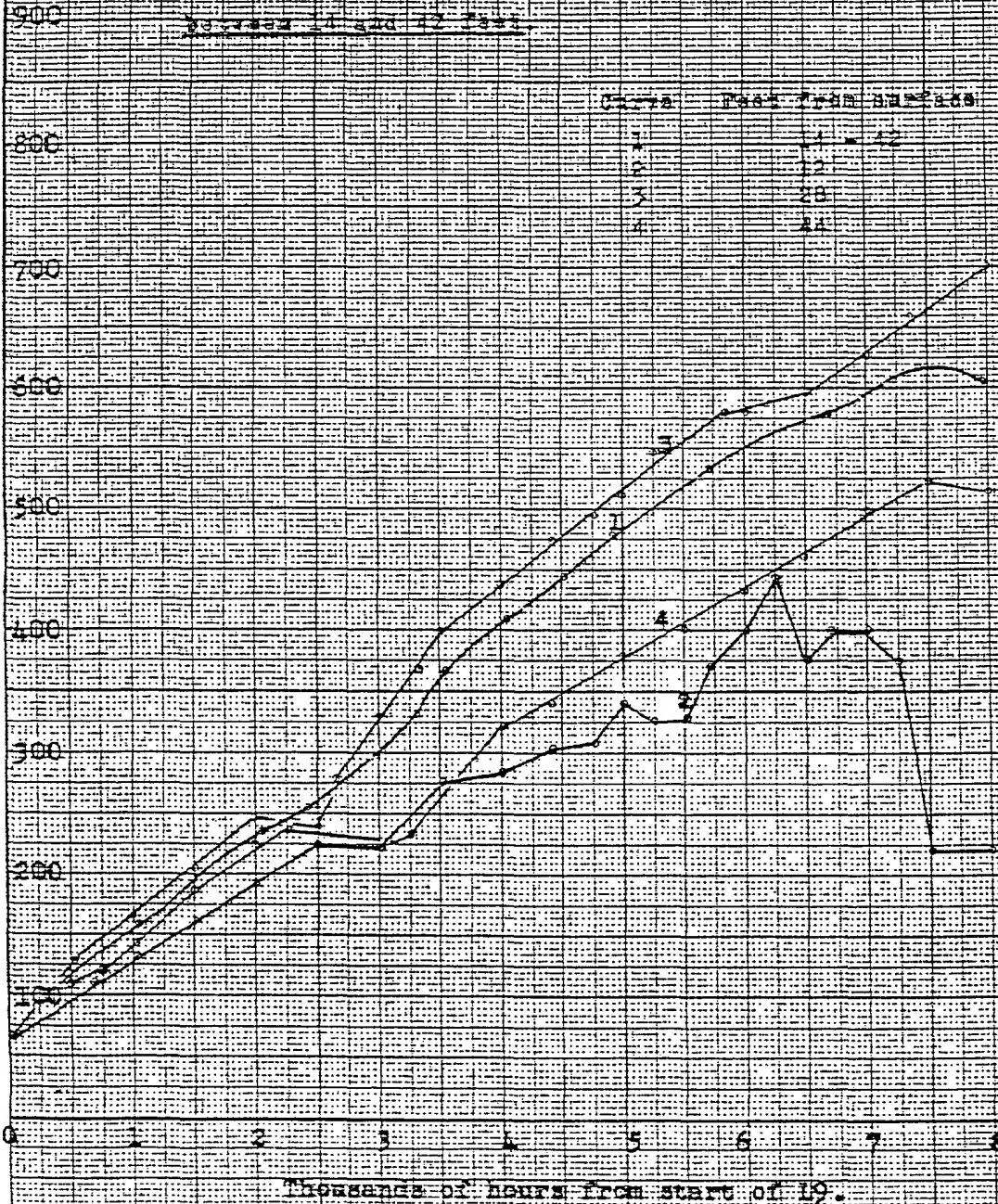
10-10X-25,
March 16, 59.
S.S.



19-436-1.
April 17-59-48.

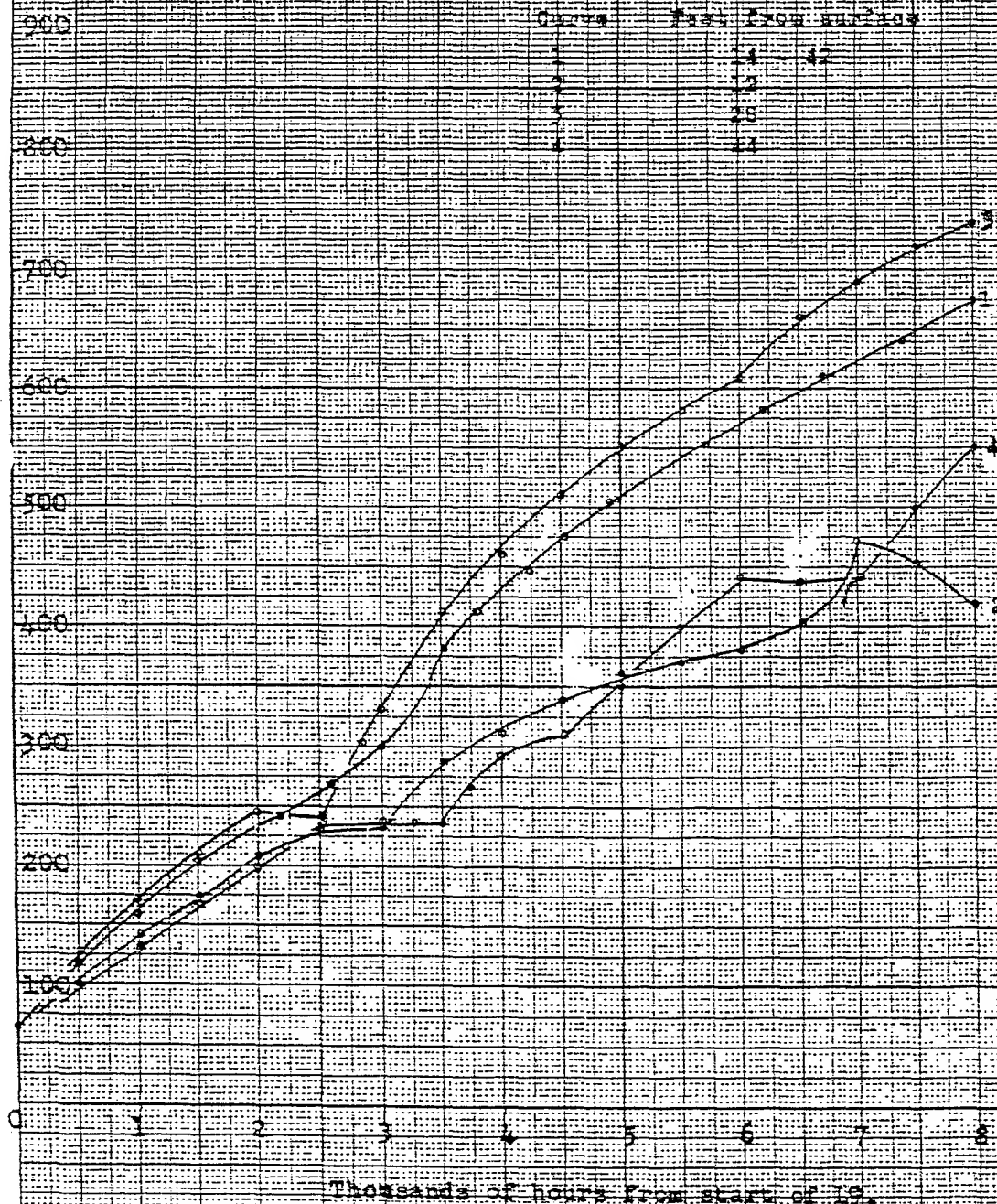
Figure 6
TEMPERATURE IN 19-422
At 12, 28, 44 feet and average temp.
Between 14 and 17 feet

Curve	Feet from surface
1	12
2	28
3	44
4	44



TEMPERATURE IN 191 T22 AT 12.28.44 FEET
AND SPREAD TEMP. BETWEEN 11 AND 12 FEET

39-475-2,
4.13.59.75.



TEMPERATURE IN DEG. F. AT 12, 25, 44 FEET
AND AVERAGE TEMP. BETWEEN 12 AND 44 FEET

CURVE	FEET FROM SURFACE
1	12 44
2	12
3	25
4	44

300

350

400

450

500

550

600

650

700

1

2

3

4

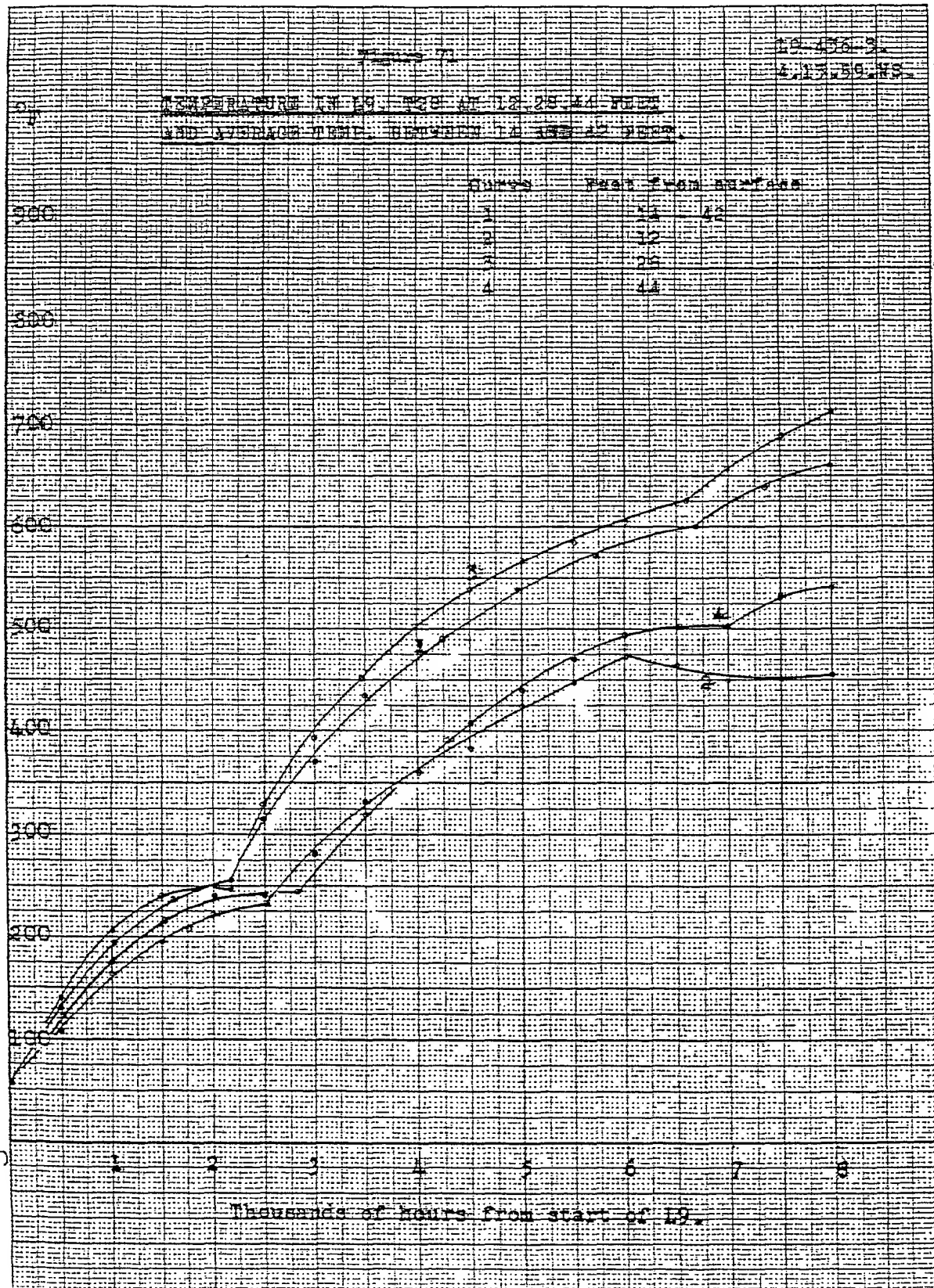
5

6

7

8

Thousands of hours from start of L.O.



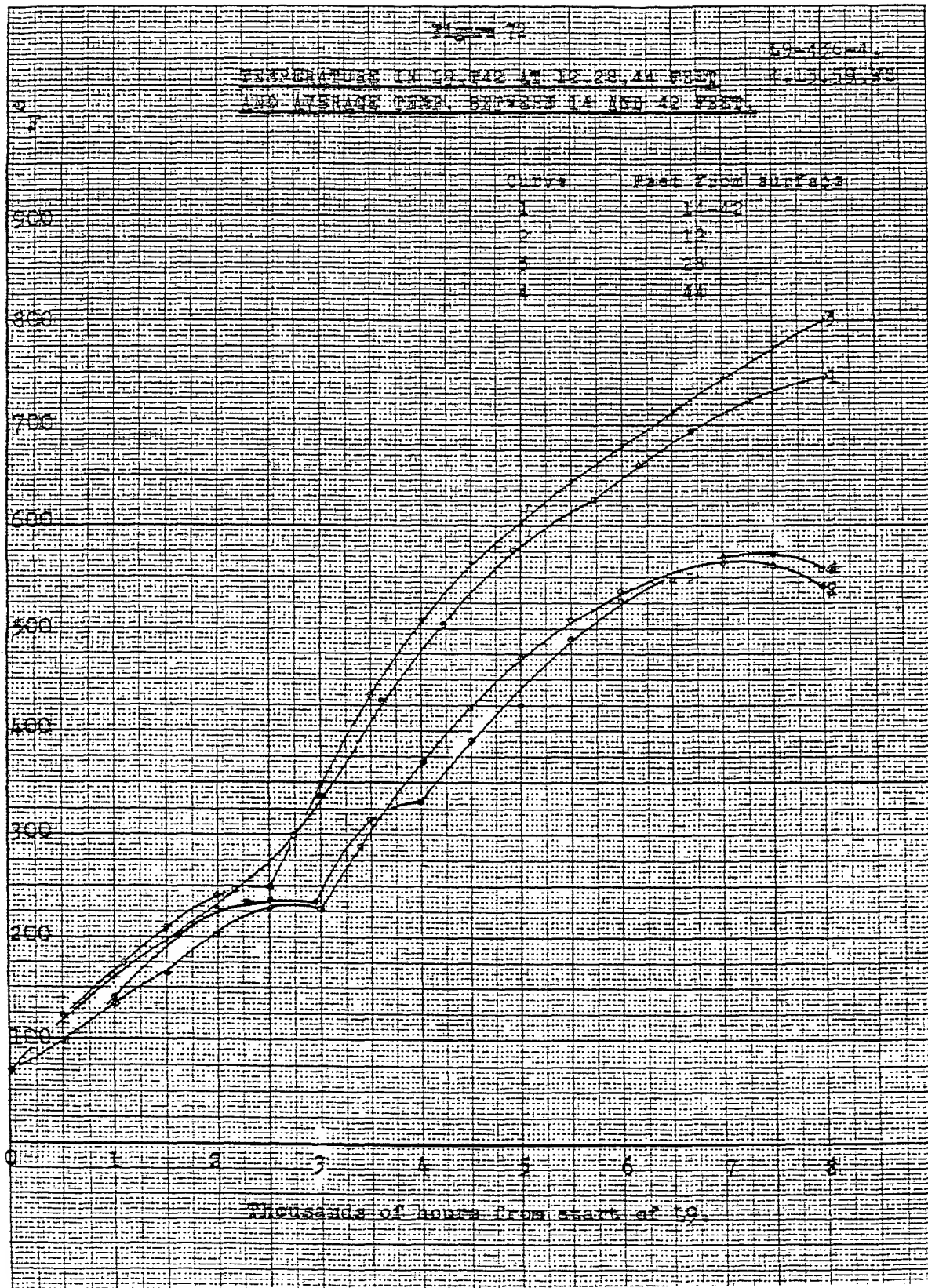


Figure 7.

29-326-5
4.13.55.20.

TEMPERATURE IN °F. FOR 12, 23, 44 YEARS
AVERAGE TEMP. BETWEEN 12 AND 42 YEARS

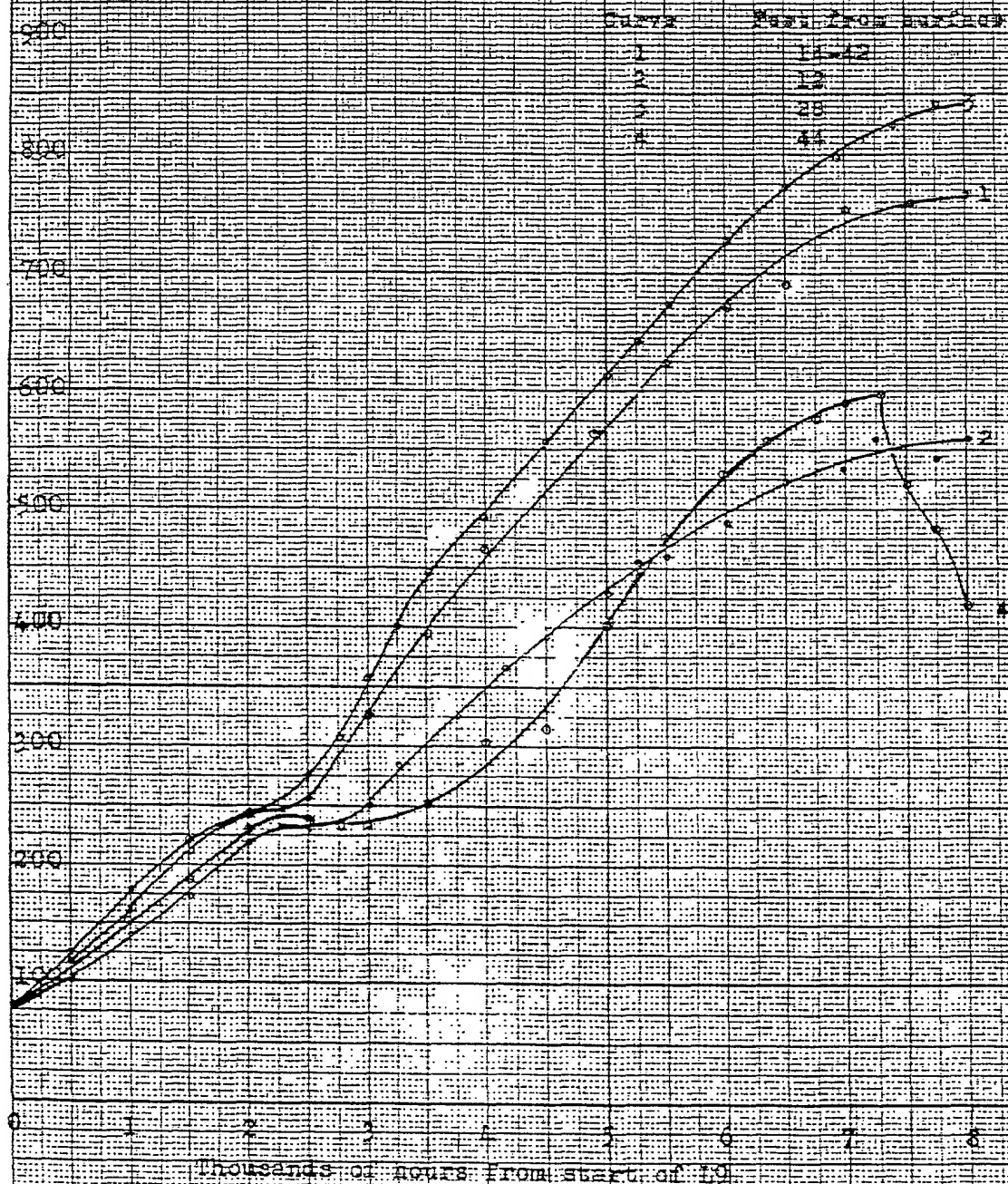


FIGURE 74

HC-476-61

4.13.59.138

TEMPERATURE IN LG. TUB AT 10.00 AM TEST
AND AVERAGE TEMP. BETWEEN 14 AND 43 FEET.

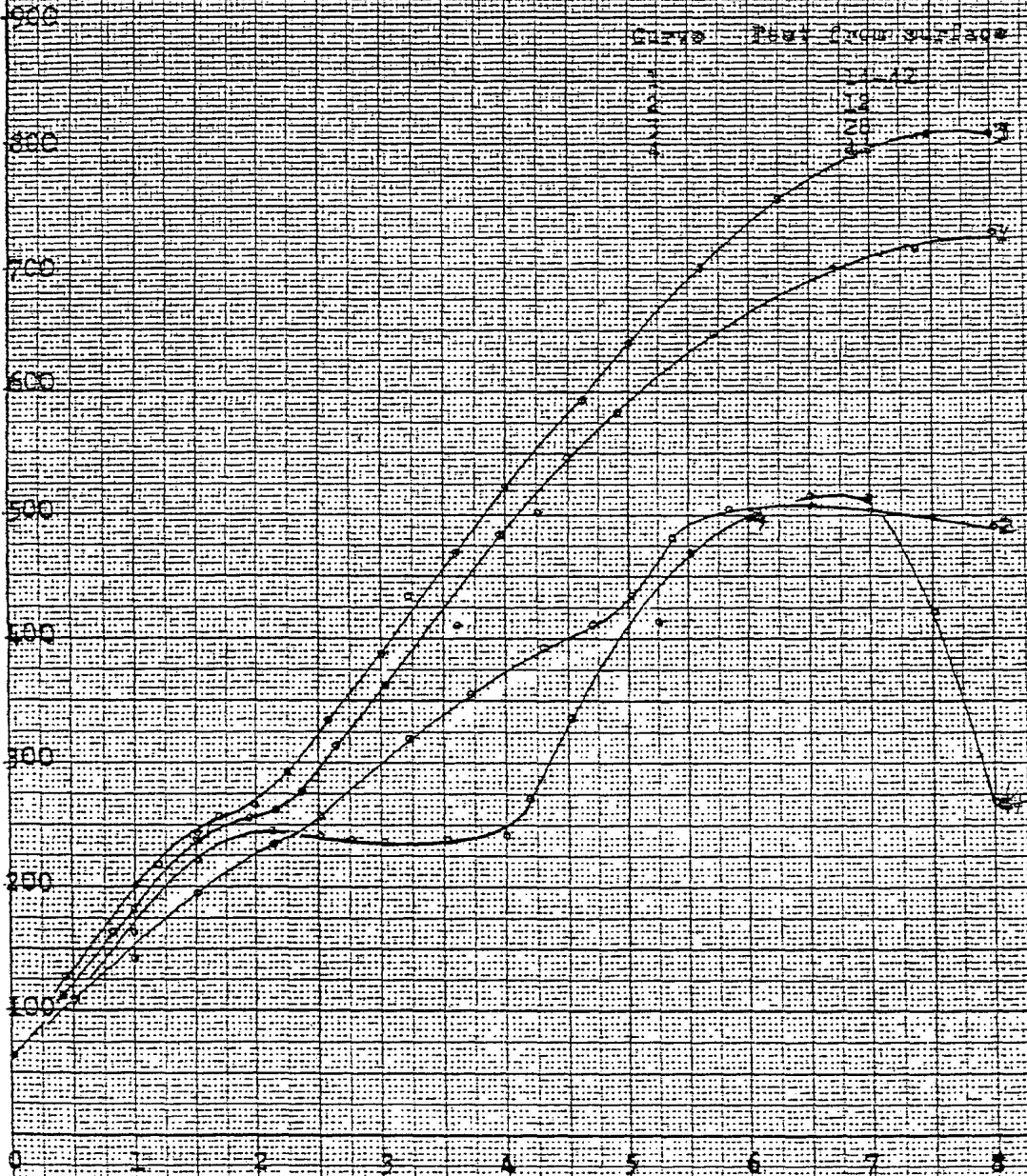
CURVE FROM SURFACE

14-43

12

28

43



Thousands of hours from start of 19.

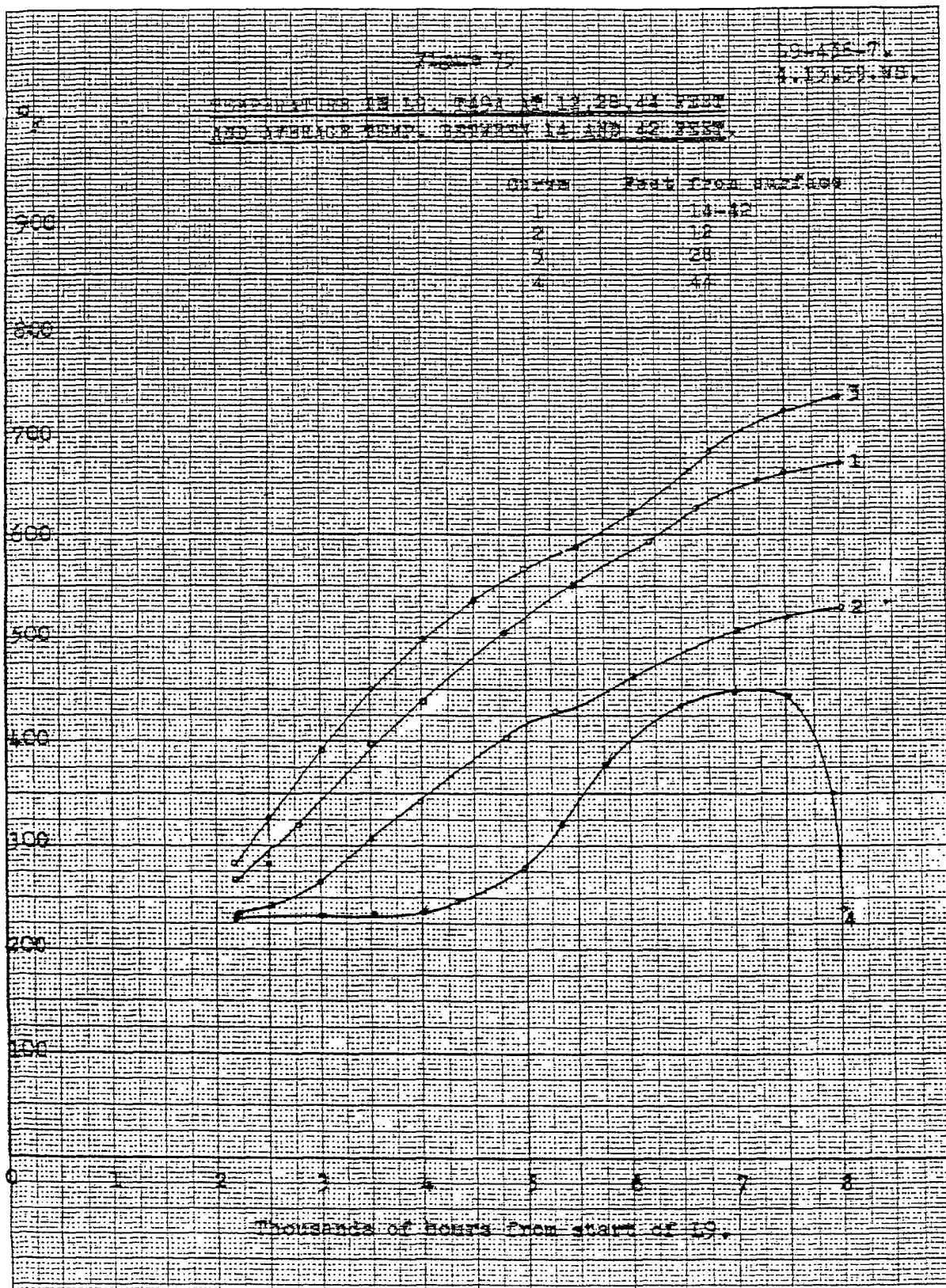
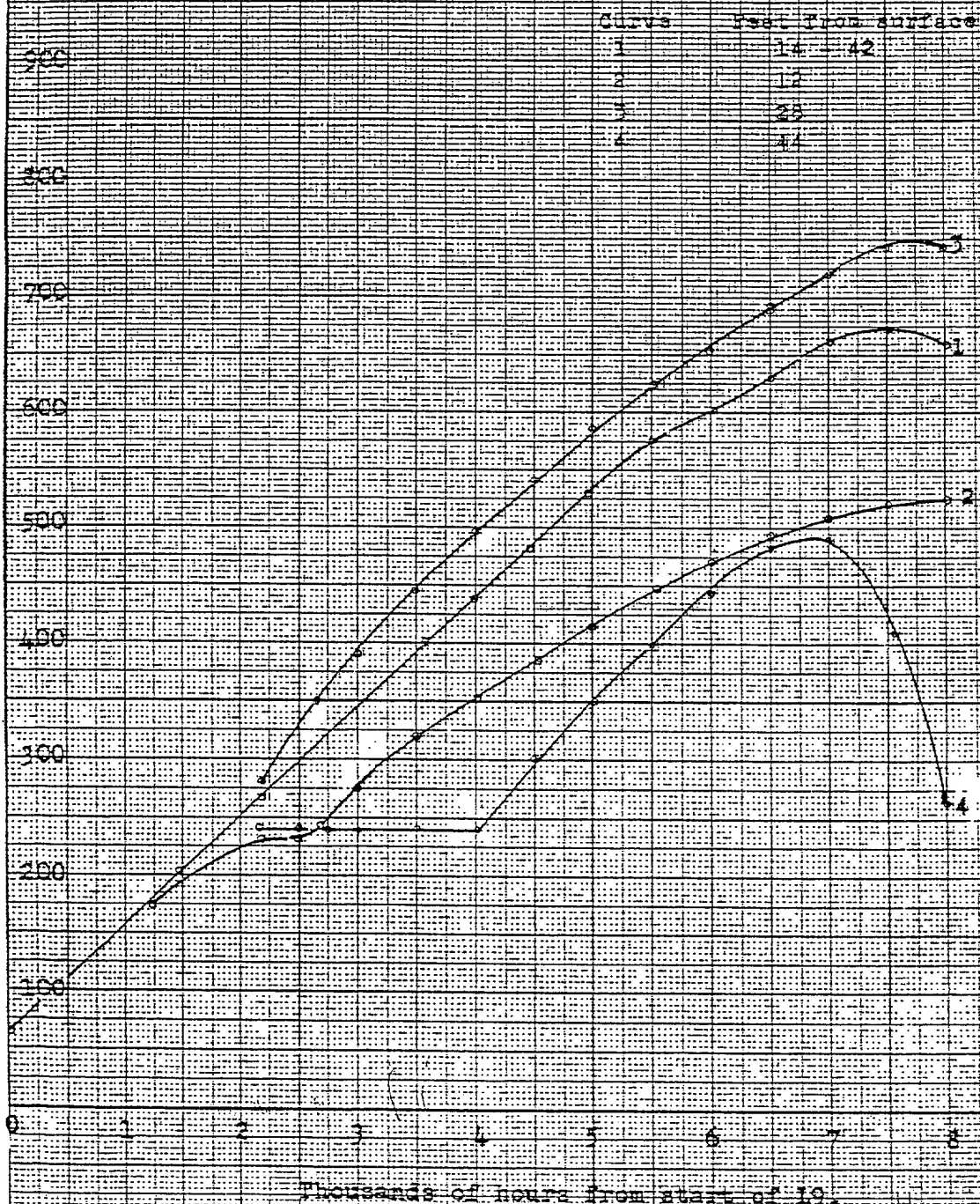


Figure 76

NO. 438-2
4-12-59.MB.

TEMPERATURE IN 69, 7102 AT 12.26.44 PEST
AND 4122402 MARY. BETWEEN 14 AND 42 FEET



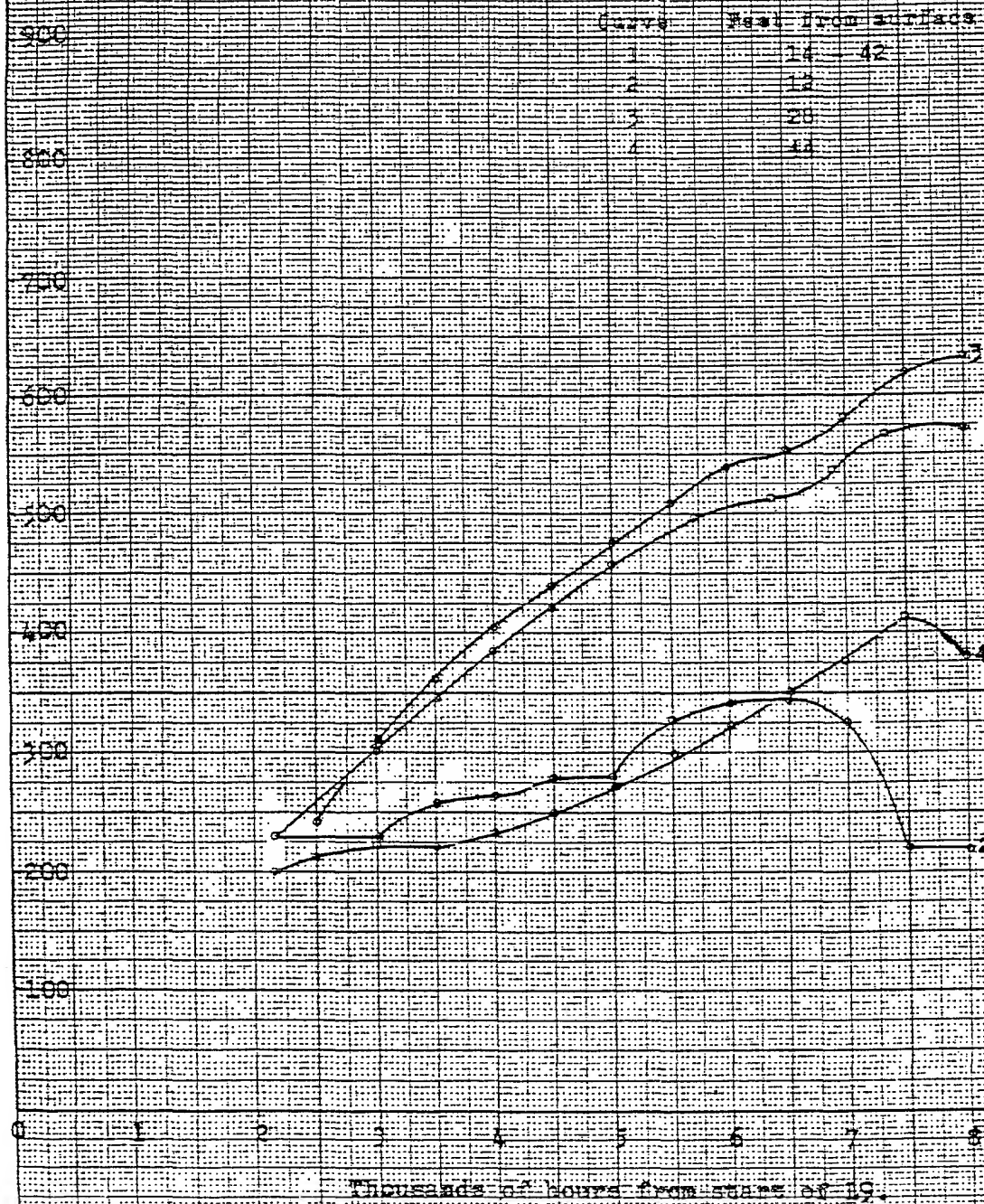
Page 77

10-436-9.

TEMPERATURE IN DEGREES AT 12, 26, 42, 58, 74, 90, 106, 122, 138, 154, 170, 186, 202, 218, 234, 250, 266, 282, 298, 314, 330, 346, 362, 378, 394, 410, 426, 442, 458, 474, 490, 506, 522, 538, 554, 570, 586, 602, 618, 634, 650, 666, 682, 698, 714, 730, 746, 762, 778, 794, 810, 826, 842, 858, 874, 890, 906, 922, 938, 954, 970, 986, 1002, 1018, 1034, 1050, 1066, 1082, 1098, 1114, 1130, 1146, 1162, 1178, 1194, 1210, 1226, 1242, 1258, 1274, 1290, 1306, 1322, 1338, 1354, 1370, 1386, 1402, 1418, 1434, 1450, 1466, 1482, 1498, 1514, 1530, 1546, 1562, 1578, 1594, 1610, 1626, 1642, 1658, 1674, 1690, 1706, 1722, 1738, 1754, 1770, 1786, 1802, 1818, 1834, 1850, 1866, 1882, 1898, 1914, 1930, 1946, 1962, 1978, 1994, 2010, 2026, 2042, 2058, 2074, 2090, 2106, 2122, 2138, 2154, 2170, 2186, 2202, 2218, 2234, 2250, 2266, 2282, 2298, 2314, 2330, 2346, 2362, 2378, 2394, 2410, 2426, 2442, 2458, 2474, 2490, 2506, 2522, 2538, 2554, 2570, 2586, 2602, 2618, 2634, 2650, 2666, 2682, 2698, 2714, 2730, 2746, 2762, 2778, 2794, 2810, 2826, 2842, 2858, 2874, 2890, 2906, 2922, 2938, 2954, 2970, 2986, 3002, 3018, 3034, 3050, 3066, 3082, 3098, 3114, 3130, 3146, 3162, 3178, 3194, 3210, 3226, 3242, 3258, 3274, 3290, 3306, 3322, 3338, 3354, 3370, 3386, 3402, 3418, 3434, 3450, 3466, 3482, 3498, 3514, 3530, 3546, 3562, 3578, 3594, 3610, 3626, 3642, 3658, 3674, 3690, 3706, 3722, 3738, 3754, 3770, 3786, 3802, 3818, 3834, 3850, 3866, 3882, 3898, 3914, 3930, 3946, 3962, 3978, 3994, 4010, 4026, 4042, 4058, 4074, 4090, 4106, 4122, 4138, 4154, 4170, 4186, 4202, 4218, 4234, 4250, 4266, 4282, 4298, 4314, 4330, 4346, 4362, 4378, 4394, 4410, 4426, 4442, 4458, 4474, 4490, 4506, 4522, 4538, 4554, 4570, 4586, 4602, 4618, 4634, 4650, 4666, 4682, 4698, 4714, 4730, 4746, 4762, 4778, 4794, 4810, 4826, 4842, 4858, 4874, 4890, 4906, 4922, 4938, 4954, 4970, 4986, 5002, 5018, 5034, 5050, 5066, 5082, 5098, 5114, 5130, 5146, 5162, 5178, 5194, 5210, 5226, 5242, 5258, 5274, 5290, 5306, 5322, 5338, 5354, 5370, 5386, 5402, 5418, 5434, 5450, 5466, 5482, 5498, 5514, 5530, 5546, 5562, 5578, 5594, 5610, 5626, 5642, 5658, 5674, 5690, 5706, 5722, 5738, 5754, 5770, 5786, 5802, 5818, 5834, 5850, 5866, 5882, 5898, 5914, 5930, 5946, 5962, 5978, 5994, 6010, 6026, 6042, 6058, 6074, 6090, 6106, 6122, 6138, 6154, 6170, 6186, 6202, 6218, 6234, 6250, 6266, 6282, 6298, 6314, 6330, 6346, 6362, 6378, 6394, 6410, 6426, 6442, 6458, 6474, 6490, 6506, 6522, 6538, 6554, 6570, 6586, 6602, 6618, 6634, 6650, 6666, 6682, 6698, 6714, 6730, 6746, 6762, 6778, 6794, 6810, 6826, 6842, 6858, 6874, 6890, 6906, 6922, 6938, 6954, 6970, 6986, 7002, 7018, 7034, 7050, 7066, 7082, 7098, 7114, 7130, 7146, 7162, 7178, 7194, 7210, 7226, 7242, 7258, 7274, 7290, 7306, 7322, 7338, 7354, 7370, 7386, 7402, 7418, 7434, 7450, 7466, 7482, 7498, 7514, 7530, 7546, 7562, 7578, 7594, 7610, 7626, 7642, 7658, 7674, 7690, 7706, 7722, 7738, 7754, 7770, 7786, 7802, 7818, 7834, 7850, 7866, 7882, 7898, 7914, 7930, 7946, 7962, 7978, 7994, 8010, 8026, 8042, 8058, 8074, 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10650, 10666, 10682, 10698, 10714, 10730, 10746, 10762, 10778, 10794, 10810, 10826, 10842, 10858, 10874, 10890, 10906, 10922, 10938, 10954, 10970, 10986, 11002, 11018, 11034, 11050, 11066, 11082, 11098, 11114, 11130, 11146, 11162, 11178, 11194, 11210, 11226, 11242, 11258, 11274, 11290, 11306, 11322, 11338, 11354, 11370, 11386, 11402, 11418, 11434, 11450, 11466, 11482, 11498, 11514, 11530, 11546, 11562, 11578, 11594, 11610, 11626, 11642, 11658, 11674, 11690, 11706, 11722, 11738, 11754, 11770, 11786, 11802, 11818, 11834, 11850, 11866, 11882, 11898, 11914, 11930, 11946, 11962, 11978, 11994, 12010, 12026, 12042, 12058, 12074, 12090, 12106, 12122, 12138, 12154, 12170, 12186, 12202, 12218, 12234, 12250, 12266, 12282, 12298, 12314, 12330, 12346, 12362, 12378, 12394, 12410, 12426, 12442, 12458, 12474, 12490, 12506, 12522, 12538, 12554, 12570, 12586, 12602, 12618, 12634, 12650, 12666, 12682, 12698, 12714, 12730, 12746, 12762, 12778, 12794, 12810, 12826, 12842, 12858, 12874, 12890, 12906, 12922, 12938, 12954, 12970, 12986, 12994, 13000

4.13.59.WS.

THE FOLLOWING TABLE SHOWS THE TEMPERATURES AT 12, 26, 42, 58, 74, 90, 106, 122, 138, 154, 170, 186, 202, 218, 234, 250, 266, 282, 298, 314, 330, 346, 362, 378, 394, 410, 426, 442, 458, 474, 490, 506, 522, 538, 554, 570, 586, 602, 618, 634, 650, 666, 682, 698, 714, 730, 746, 762, 778, 794, 810, 826, 842, 858, 874, 890, 906, 922, 938, 954, 970, 986, 1002, 1018, 1034, 1050, 1066, 1082, 1098, 1114, 1130, 1146, 1162, 1178, 1194, 1210, 1226, 1242, 1258, 1274, 1290, 1306, 1322, 1338, 1354, 1370, 1386, 1402, 1418, 1434, 1450, 1466, 1482, 1498, 1514, 1530, 1546, 1562, 1578, 1594, 1610, 1626, 1642, 1658, 1674, 1690, 1706, 1722, 1738, 1754, 1770, 1786, 1802, 1818, 1834, 1850, 1866, 1882, 1898, 1914, 1930, 1946, 1962, 1978, 1994, 2010, 2026, 2042, 2058, 2074, 2090, 2106, 2122, 2138, 2154, 2170, 2186, 2202, 2218, 2234, 2250, 2266, 2282, 2298, 2314, 2330, 2346, 2362, 2378, 2394, 2410, 2426, 2442, 2458, 2474, 2490, 2506, 2522, 2538, 2554, 2570, 2586, 2602, 2618, 2634, 2650, 2666, 2682, 2698, 2714, 2730, 2746, 2762, 2778, 2794, 2810, 2826, 2842, 2858, 2874, 2890, 2906, 2922, 2938, 2954, 2970, 2986, 2994, 3000



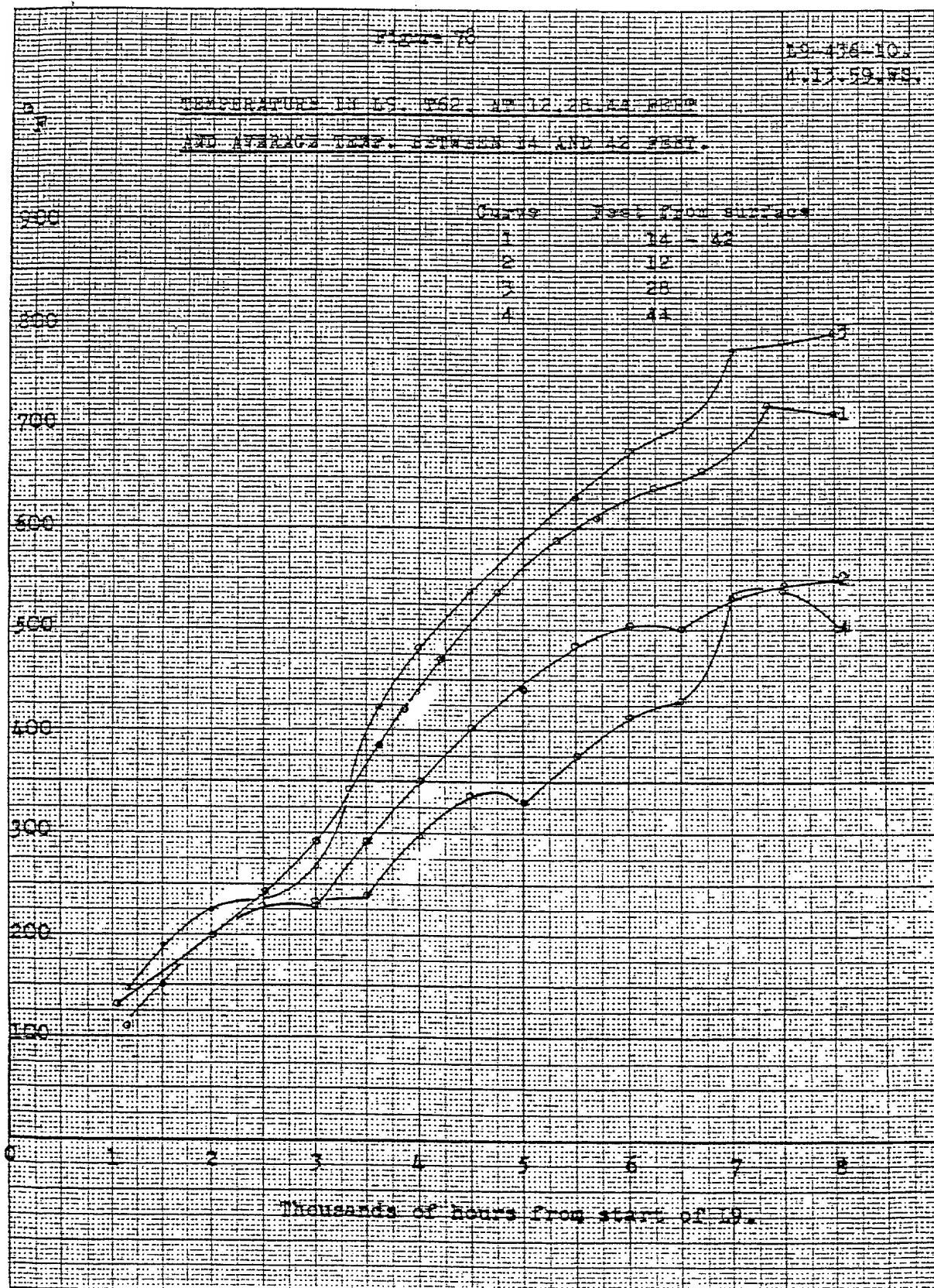


Figure 79

19-436-11.
4.13.70.WS.

TEMPERATURE IN DEG. F. AT 12, 28, 44 FEET
AND AVERAGE TEMP. DEPTHS 12 AND 40 FEET.



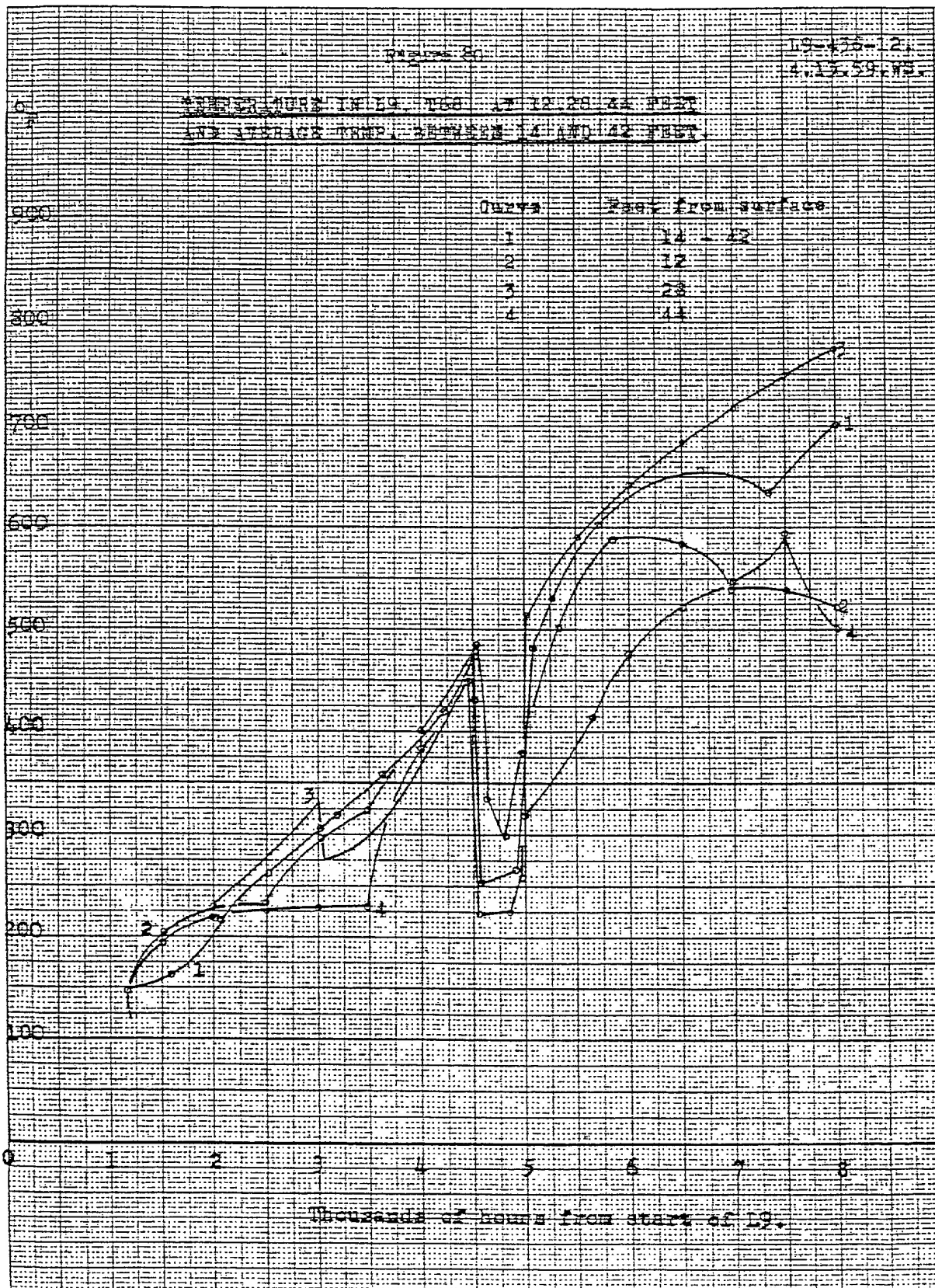


Figure 31

1944-45
4.13.45-45.45.45

TEMPERATURE IN 25, 27.1, 27.25, 44 FEET
AND AVERAGE DEPTH BETWEEN 14 AND 40 FEET

Curve	Feet from surface
1	12 - 42
2	12
3	25
4	40

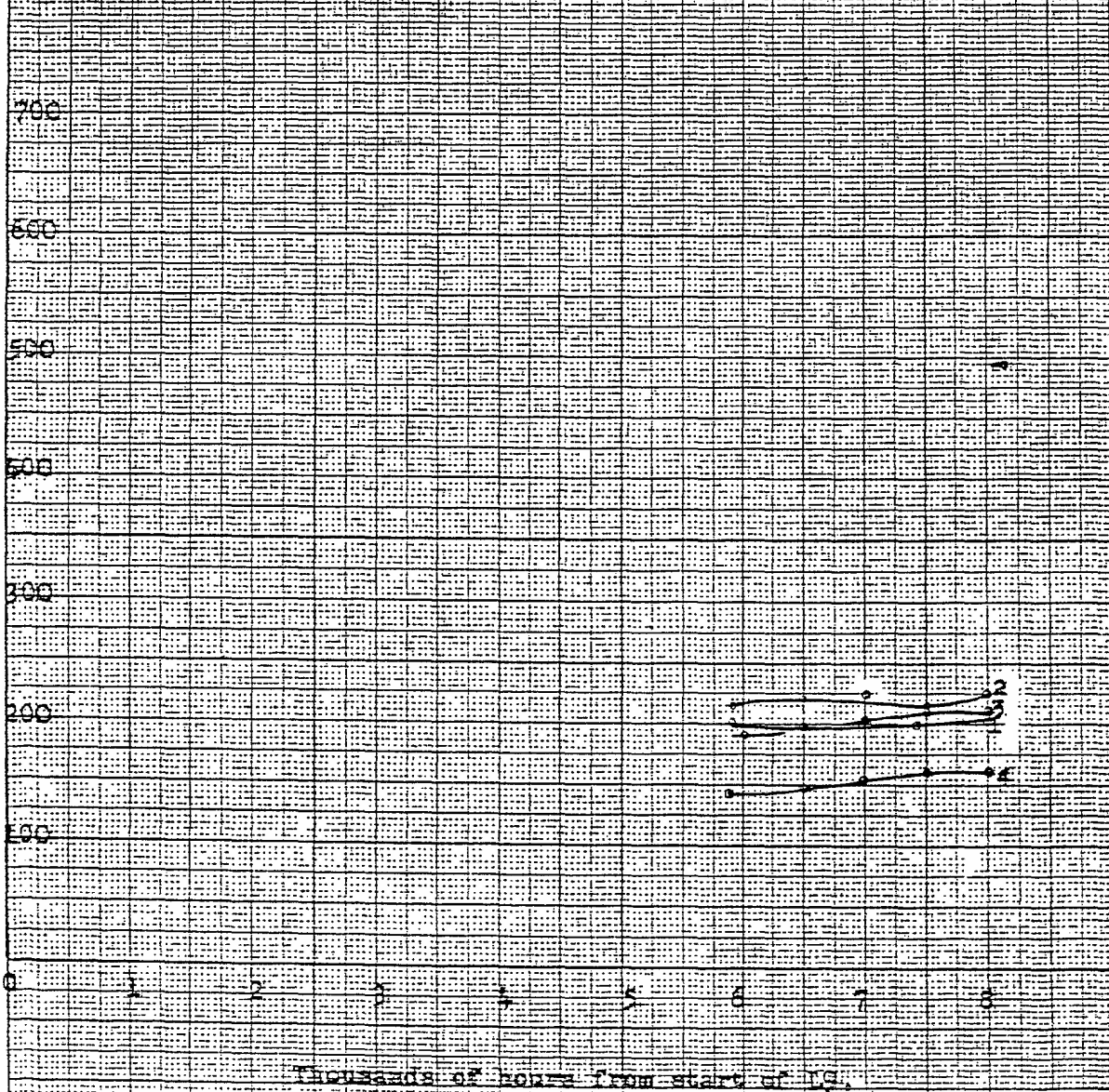
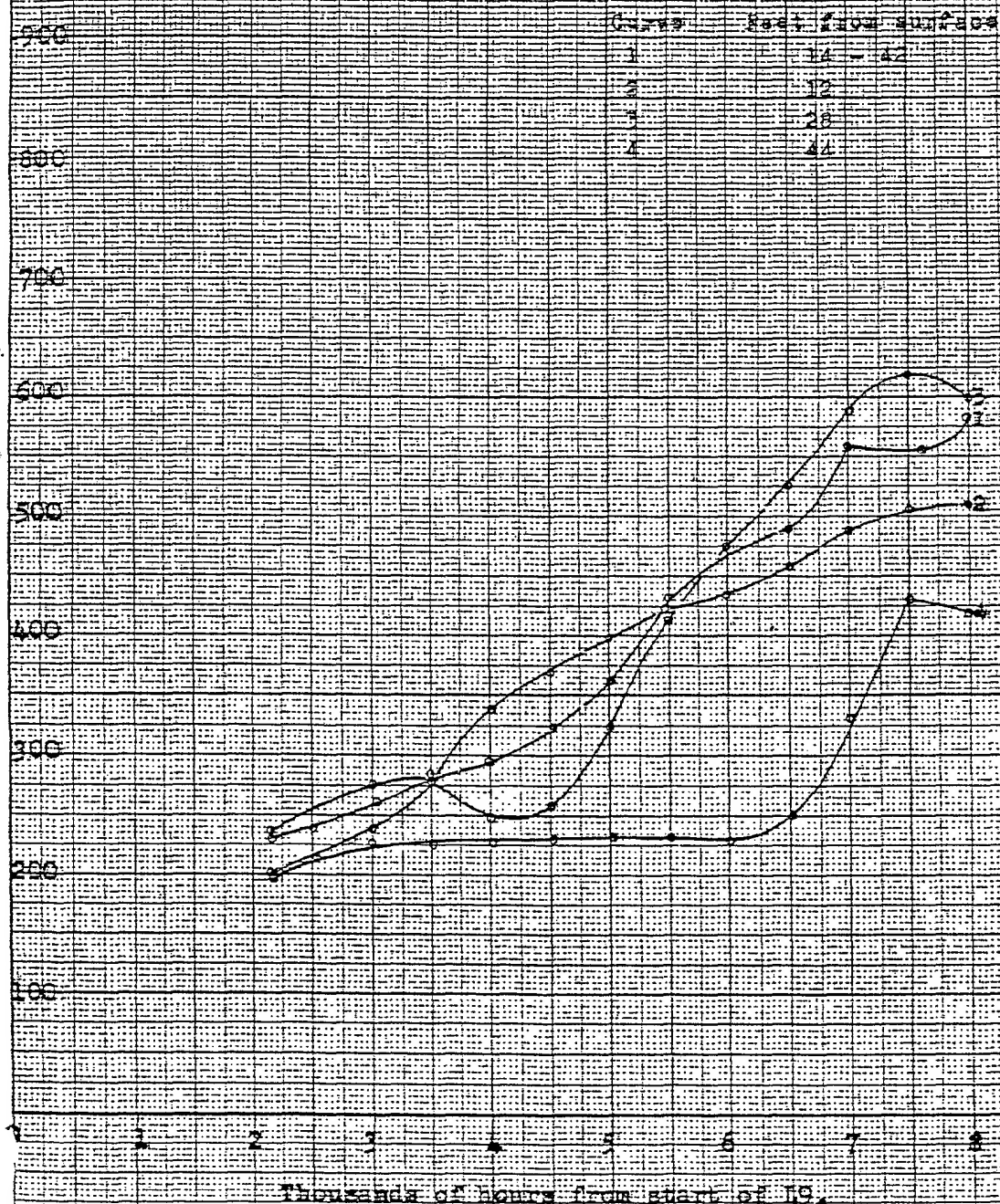


Figure 20

19-476-14.

4.13.65.WS.

TEMPERATURE IN 19. 47101. AT 12.25.41 PM ET
AND AVERAGE TEMP. BETWEEN 14 AND 43 PM ET.



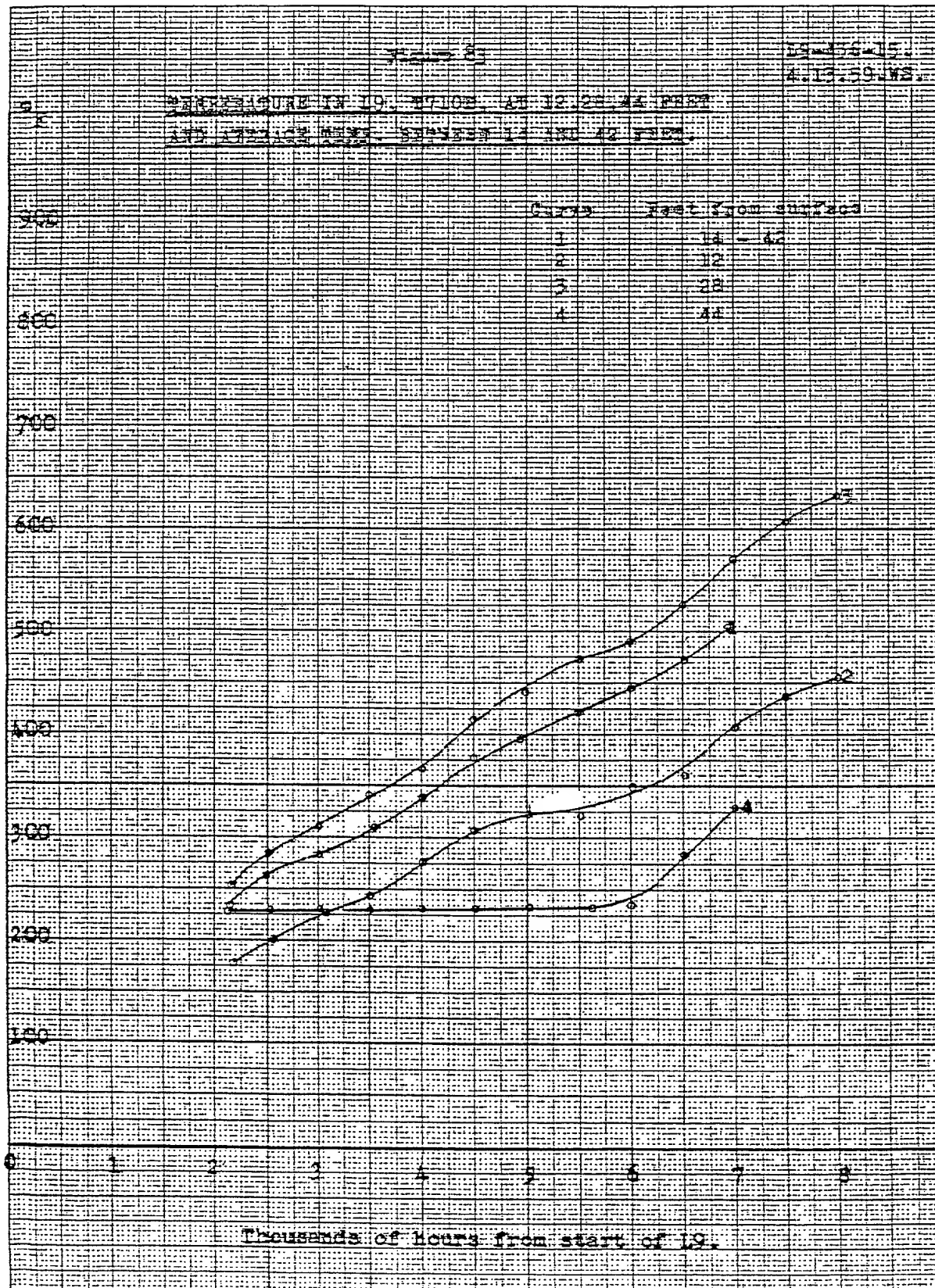
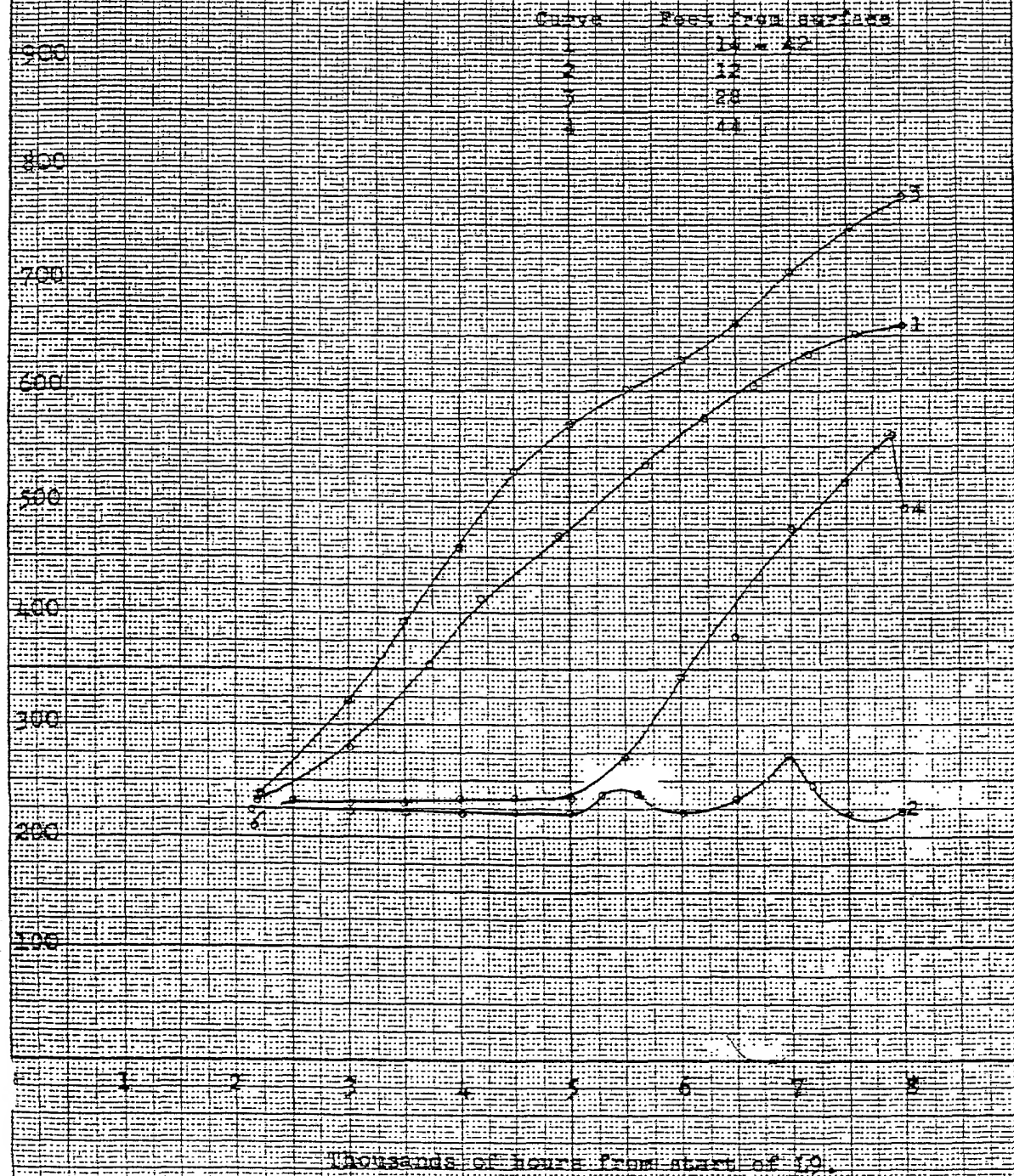


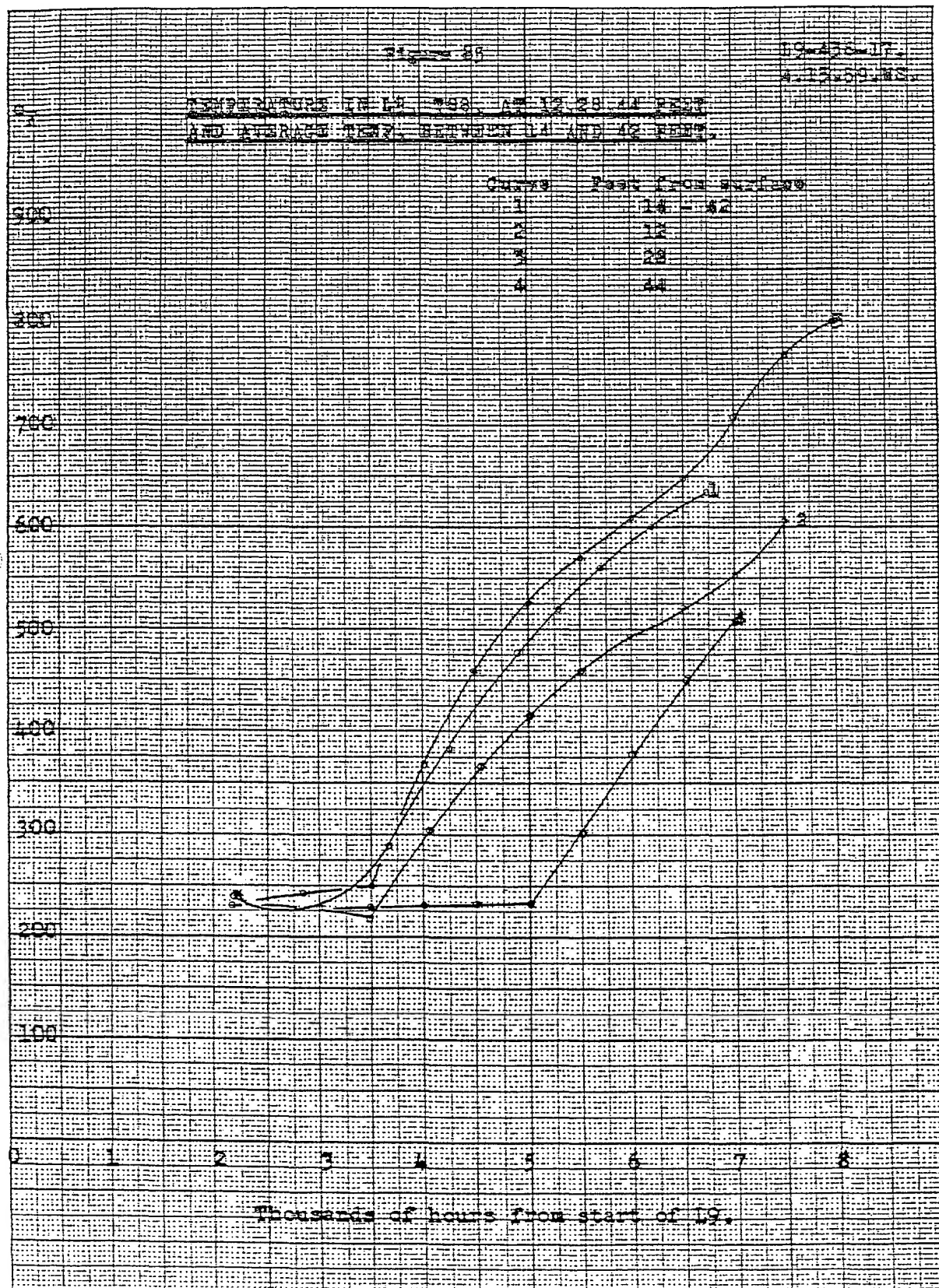
Figure 24

30-436-16.

1. 3. 5. 7. 9.

TEMPERATURE IN $^{\circ}\text{F}$. AT 12, 28, 44 FEET
AND AVERAGE DEEP BETWEEN 14 AND 42 FEET





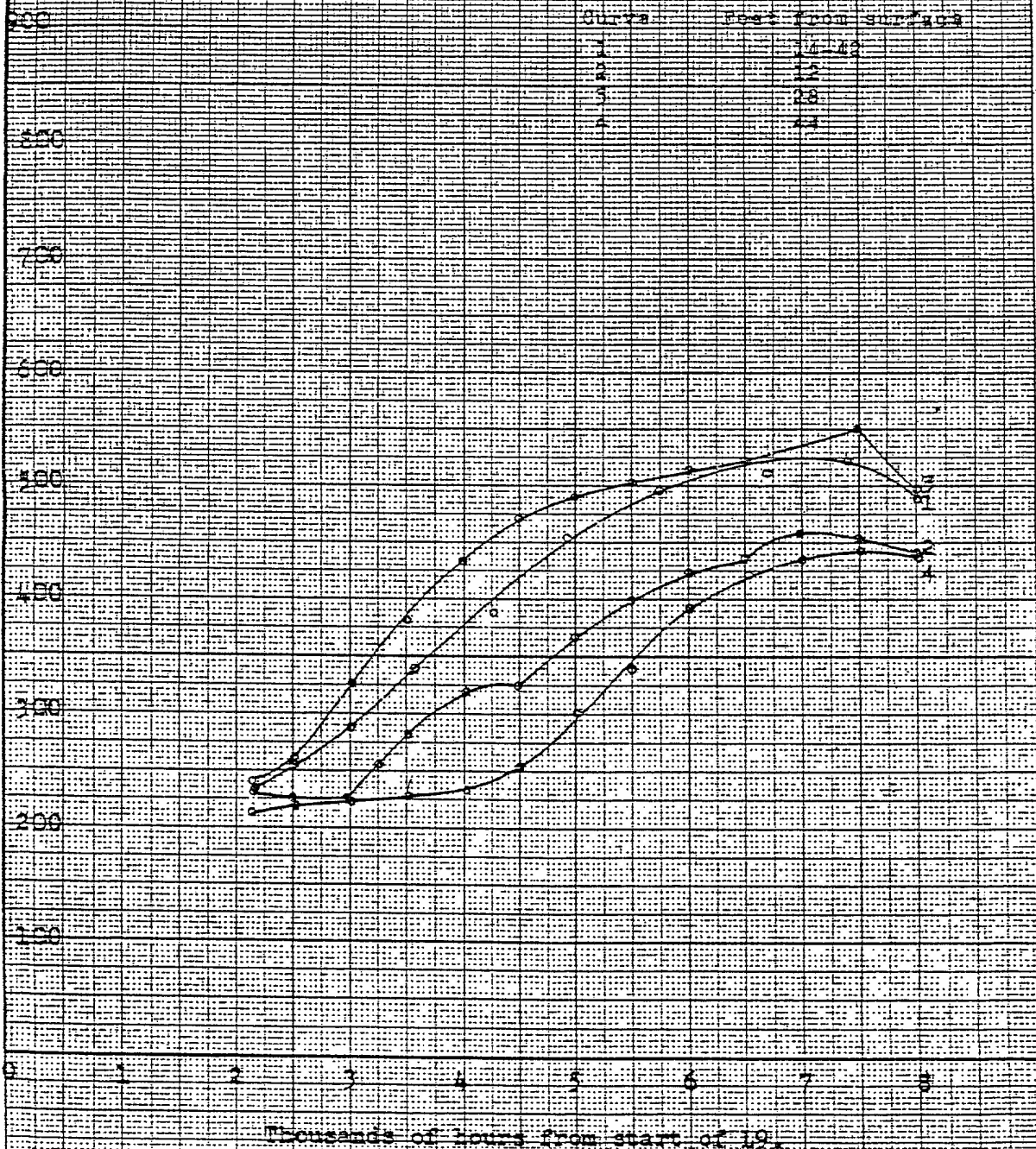
Page 25

10-436-18.

July 19, 1955.

TEMPERATURE IN 19, FLOZ, AT 12, 28, 44 FEET
AND AVERAGE TEMP. BETWEEN 12 AND 28 FEET.

Curve	Feet from surface
1	12-42
2	12
3	28
4	44



5-22-59 ~~EP~~

Figure 88

AVERAGE TEMPERATURE AT 28 FEET AND 14 TO 42 FEET IN "INSIDE" TEMPERATURE WELLS
(NOV. 15, 18, 21, 22, 23, 24, 28)

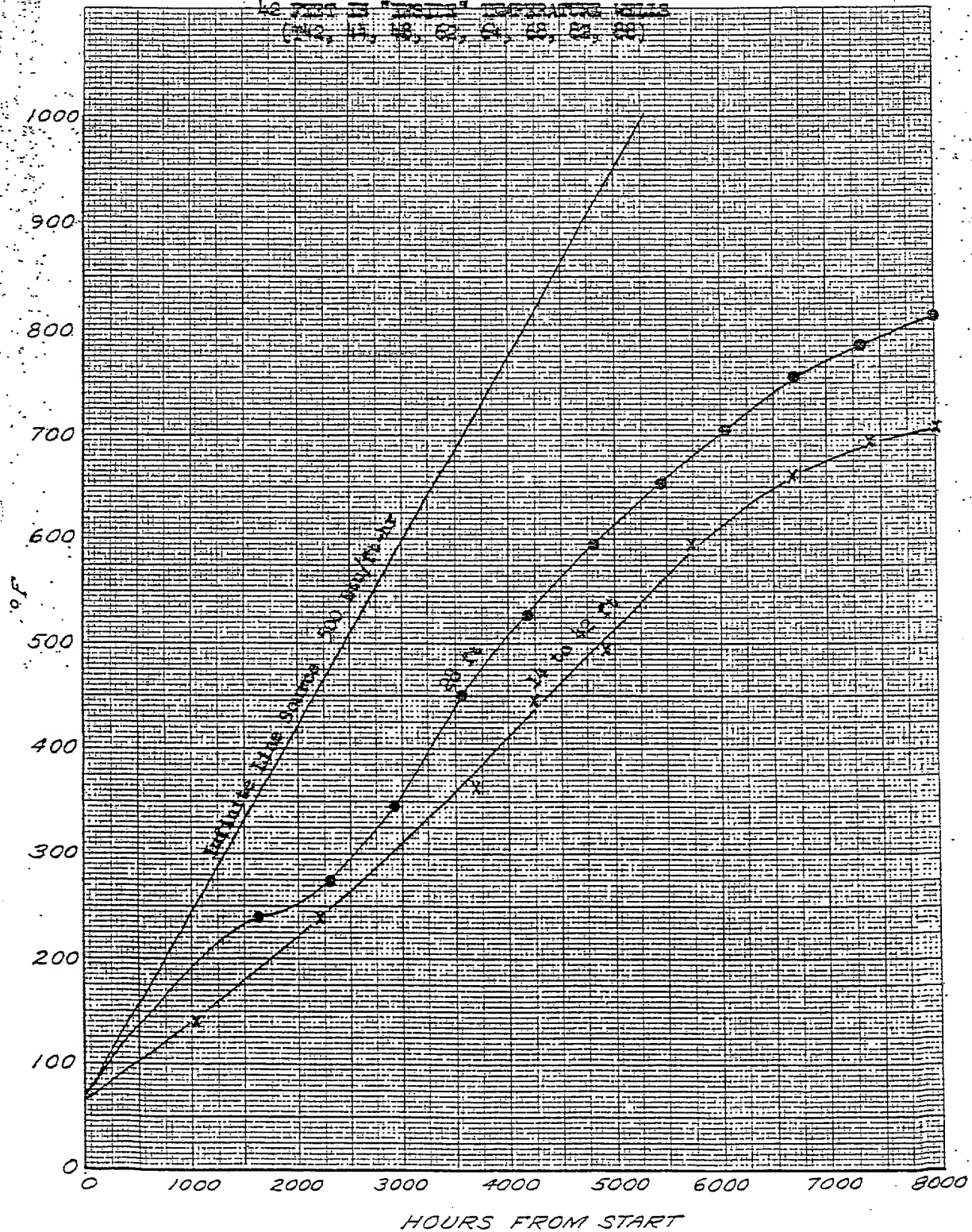


Figure 80

TEMPERATURE INSIDE BU-4, BU-5, BU-4, BU-5

10-440-11

4-20-59.WB.

SURFACE CASINGS AT 11-15 HOURS AFTER SHUT OFF

CURVE	WATER CASING	11-15 HOURS AFTER SHUT OFF
1	BU-4	11
2	BU-5	12
3	BU-4	14
4	BU-5	15

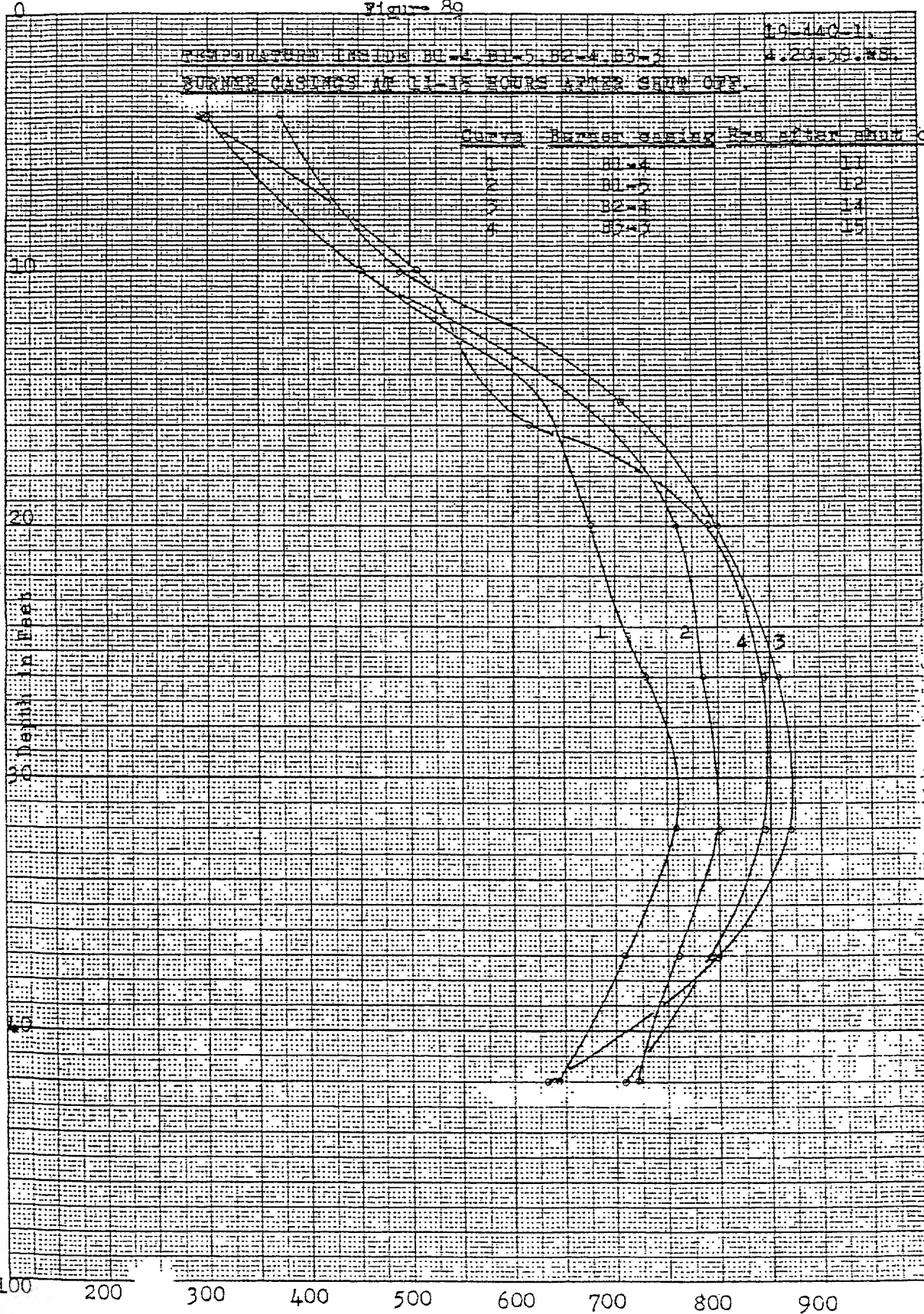
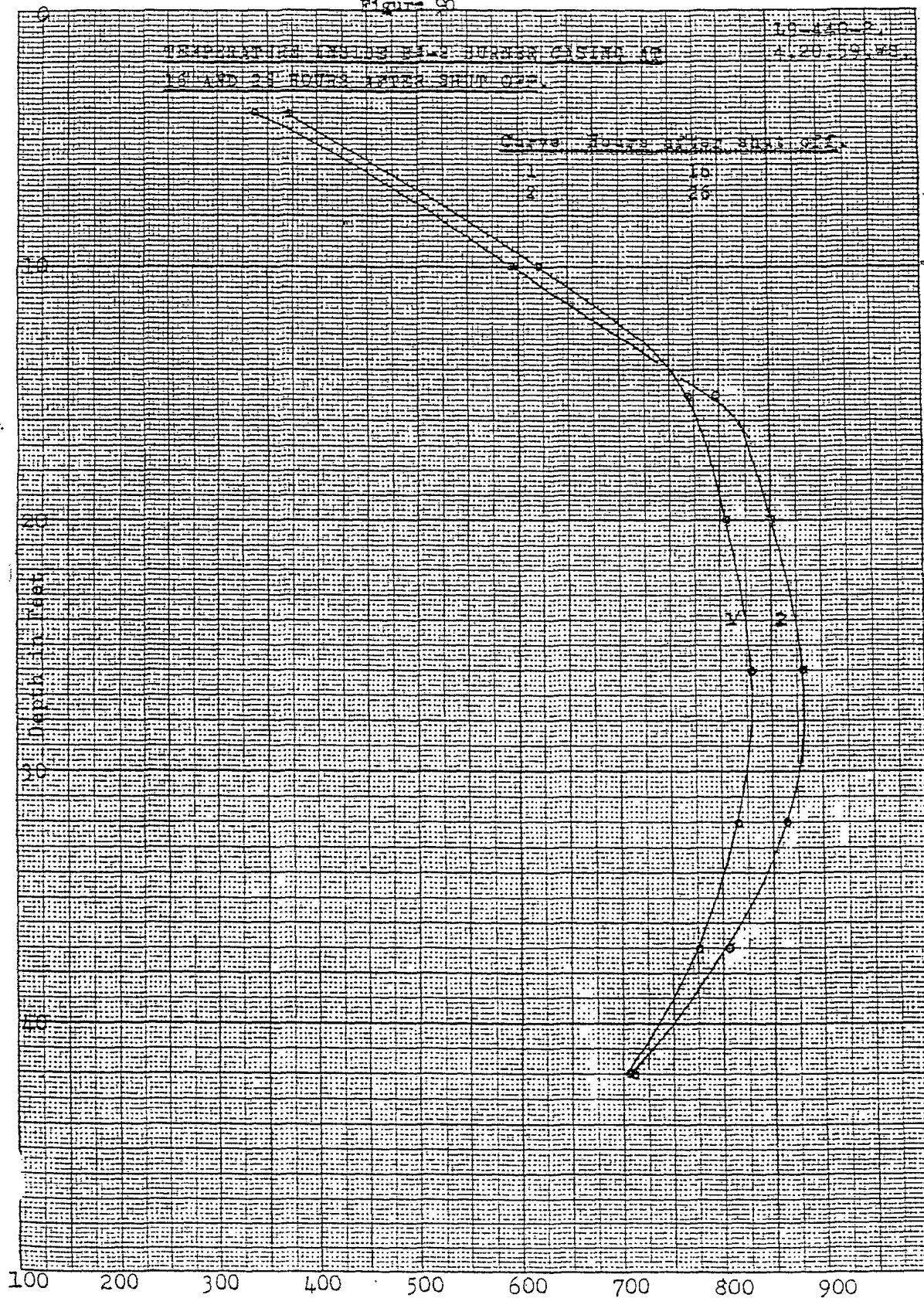


Figure 20



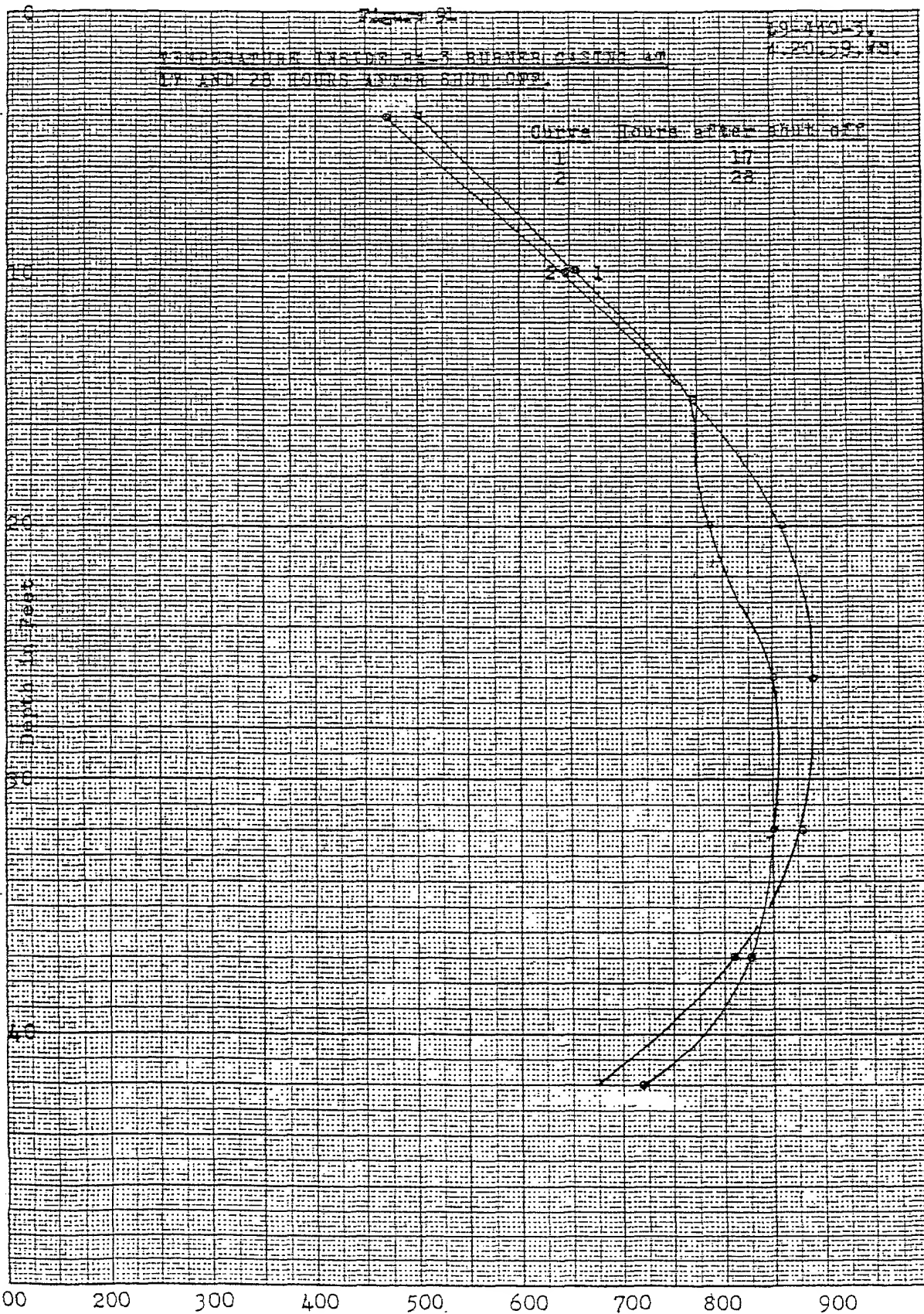


Figure 92

TEMPERATURE INSIDE OF 6 INCH CASTING
AT 19 AND 29 HOURS AFTER SHUT OFF

Figure 92
A. 20, 59, 83.

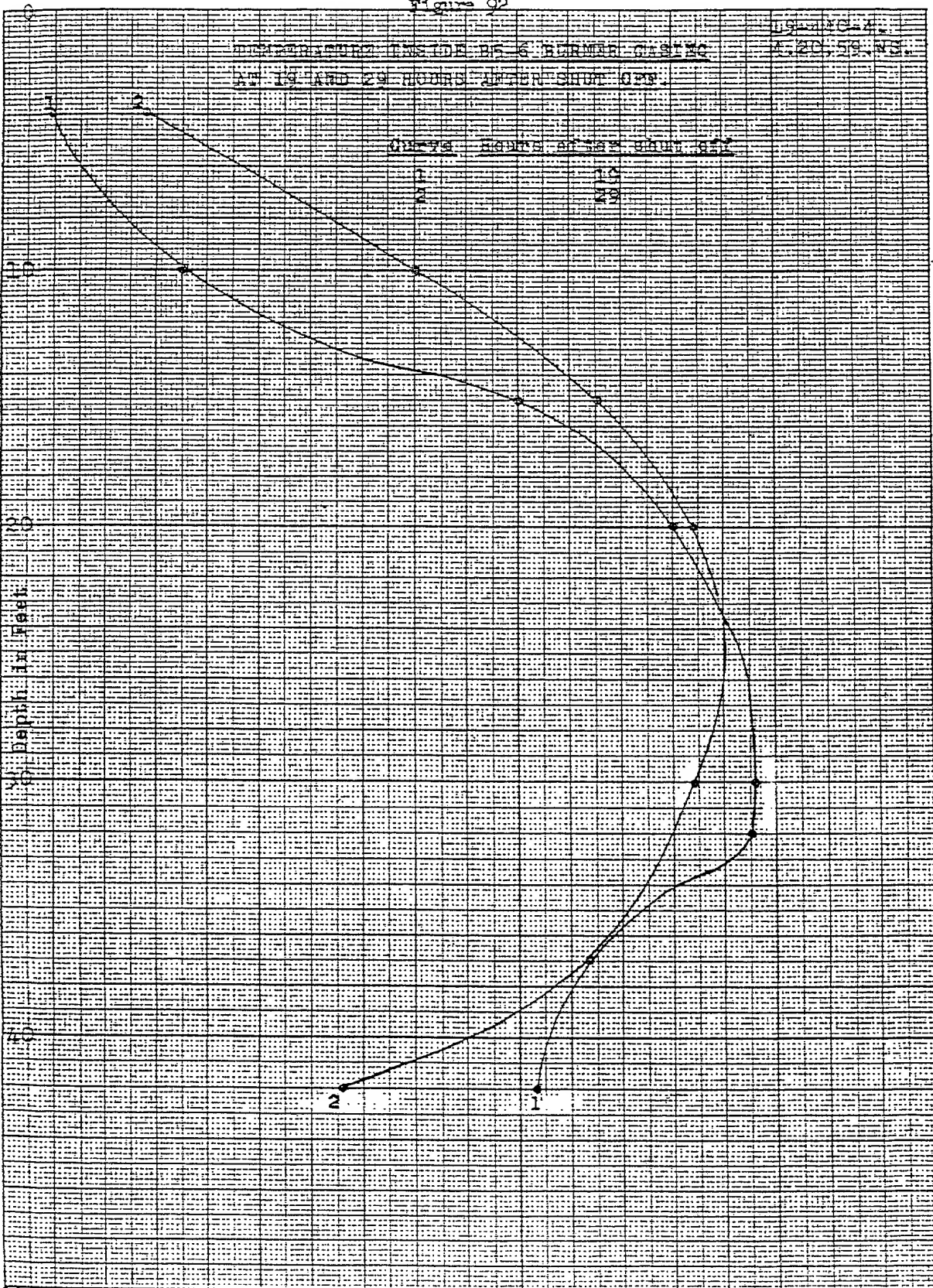
Curves Hours After Shut Off

19

29

Depth in Feet

100 200 300 400 500 600 700 800 900



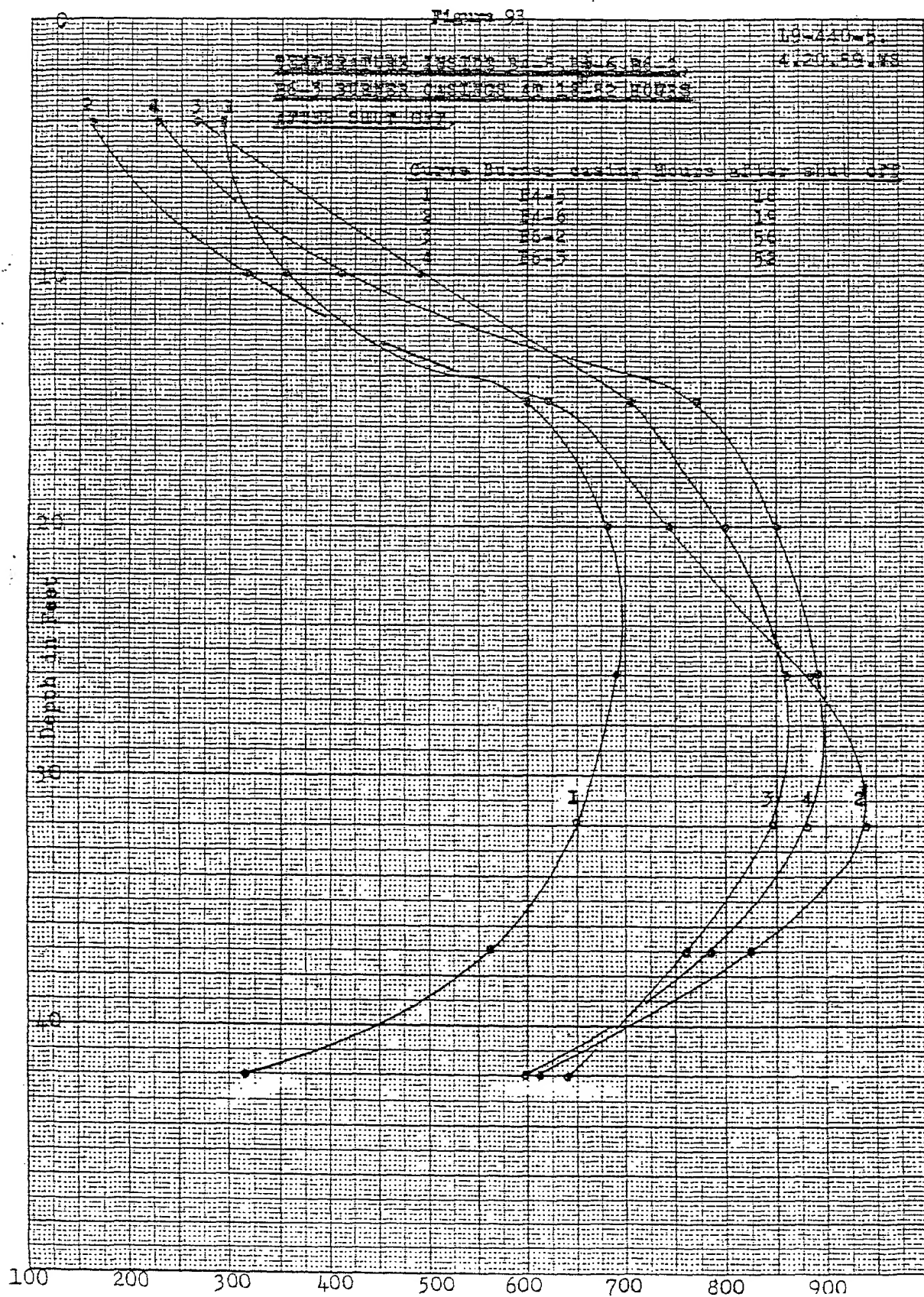


Figure 24

TEMPERATURE INSIDE B6-6, B7-6, B7-7
PUSHER CASINGS AT 75-50 HOURS AFTER
SHUT OFF

20-440-6
4.20.59.KS.

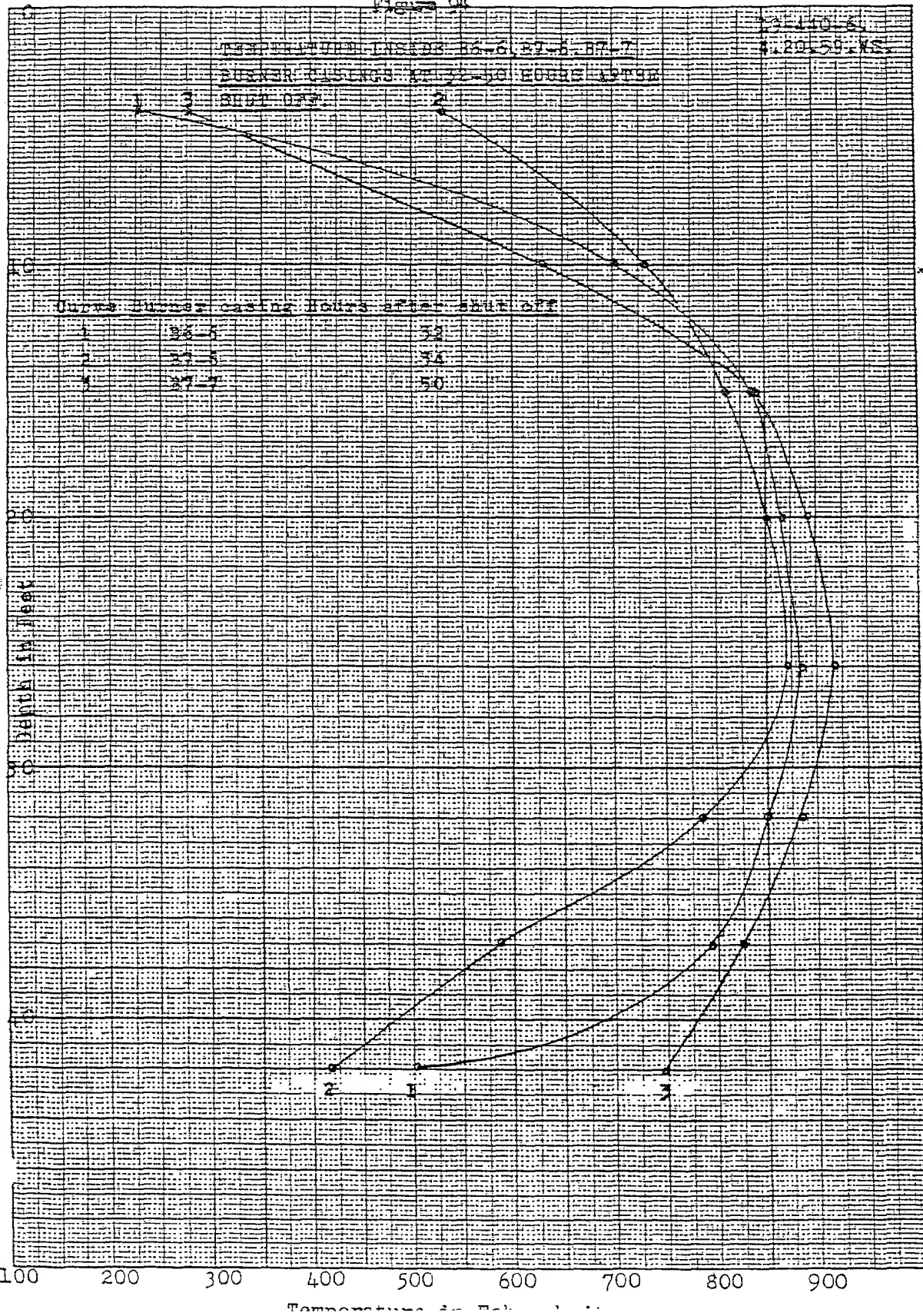


Figure 95

COMPRESSION TENSILE BT-1 BT-2 BT-3

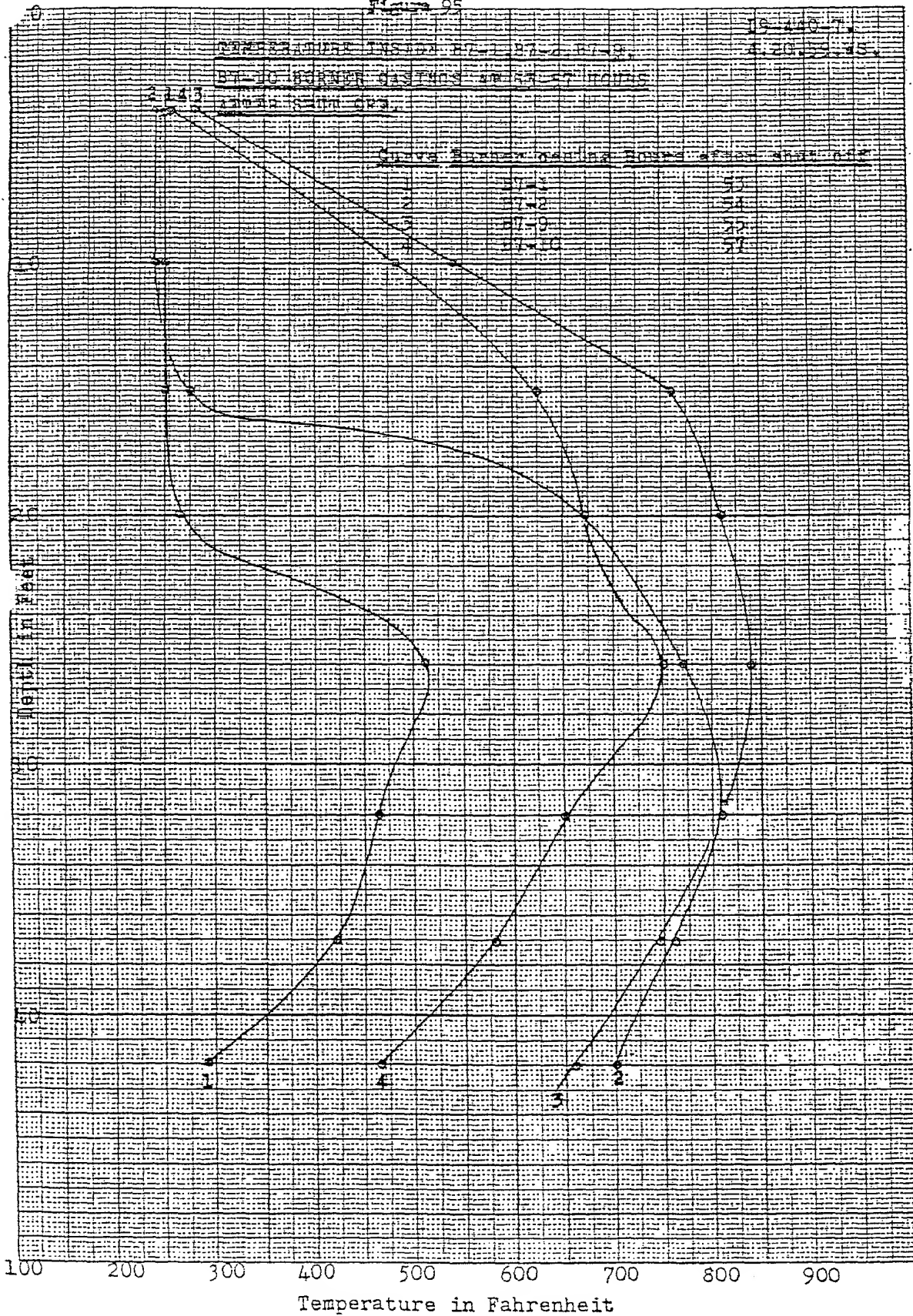
10-450-7
1-20-55-45

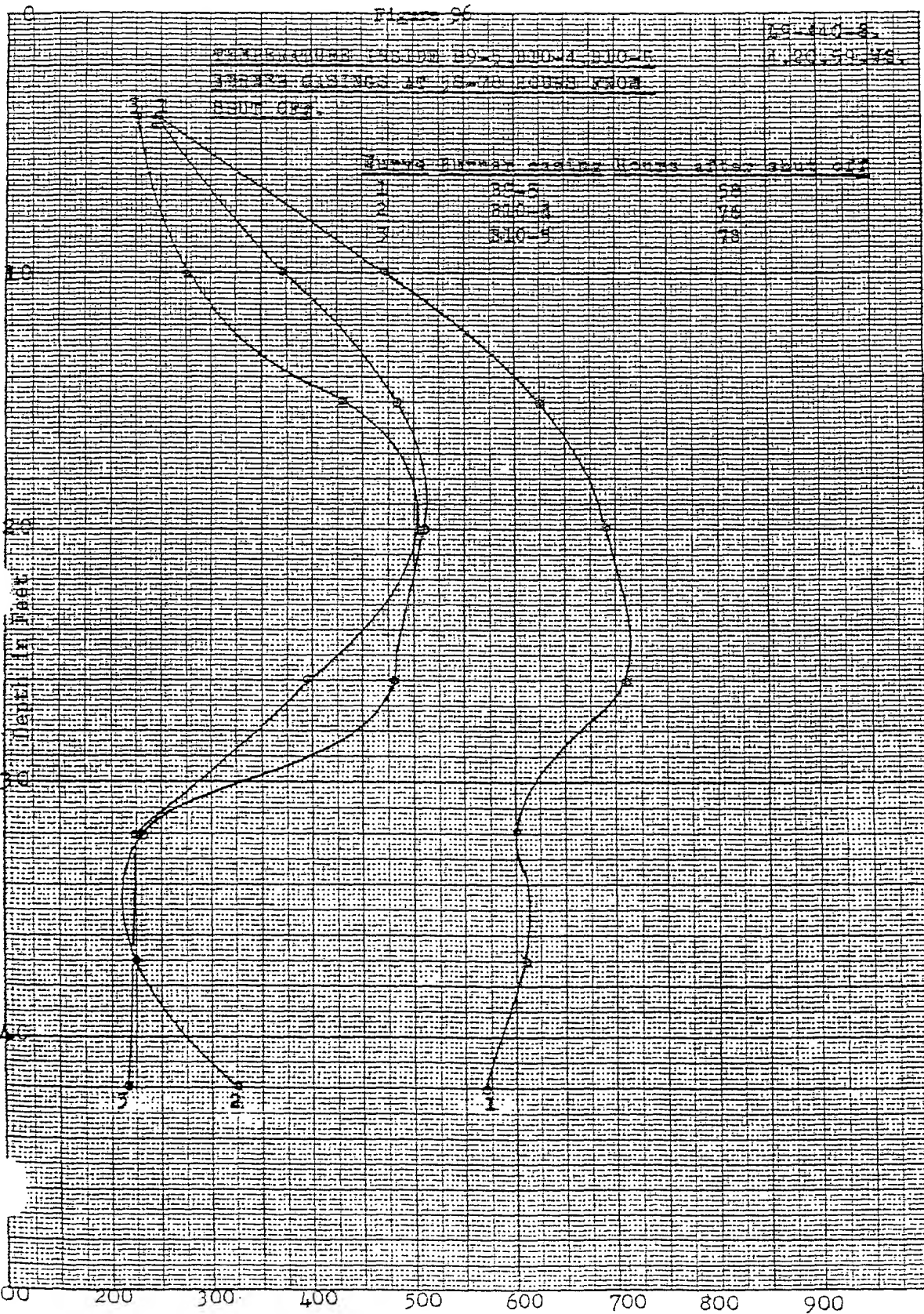
BT-10 BORNER CASTING WITH STAINLESS

2143

Curve showing loading points after anneal

1	BT-1	50
2	BT-2	54
3	BT-3	52
4	BT-10	57

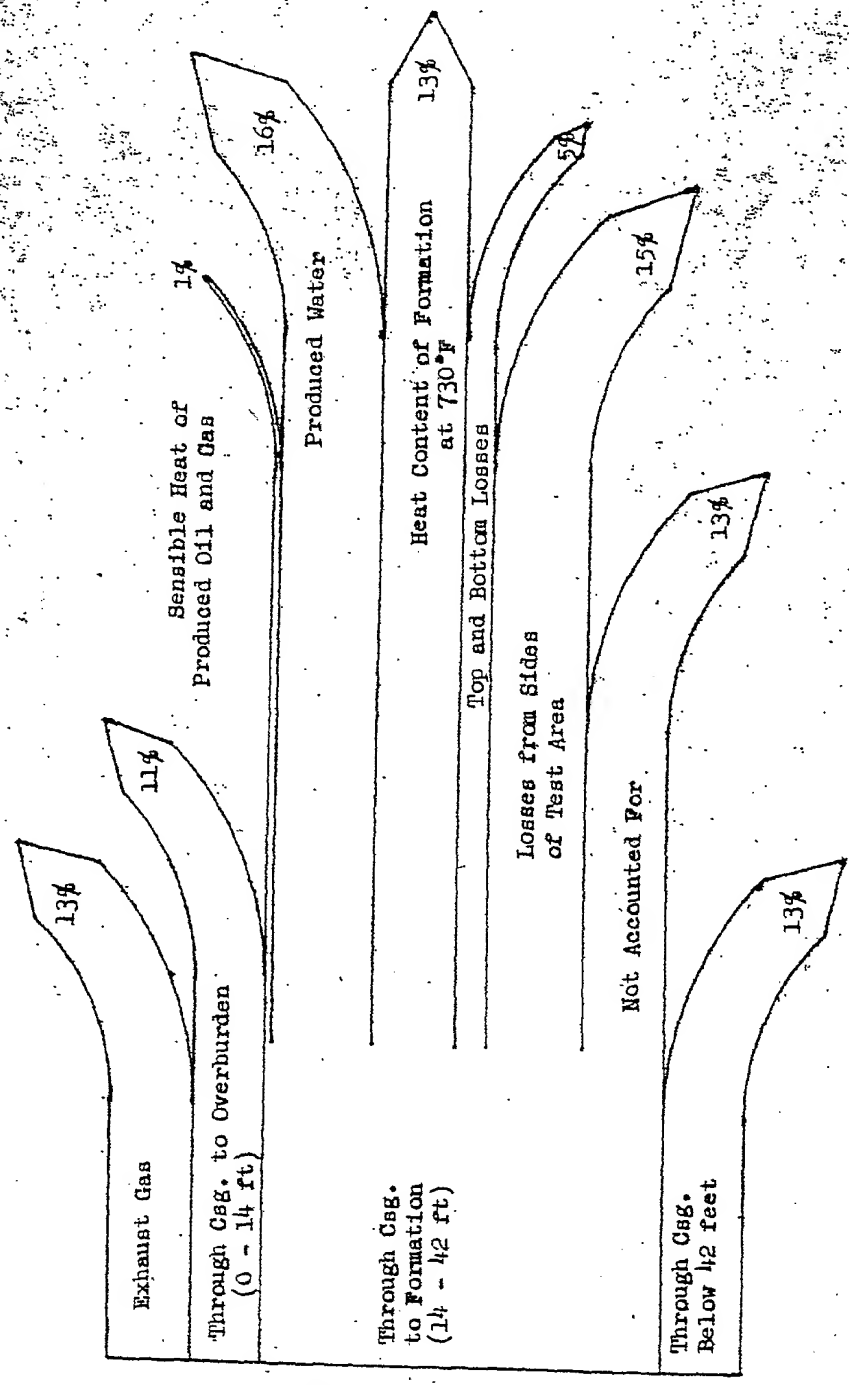




6.17.59, HP

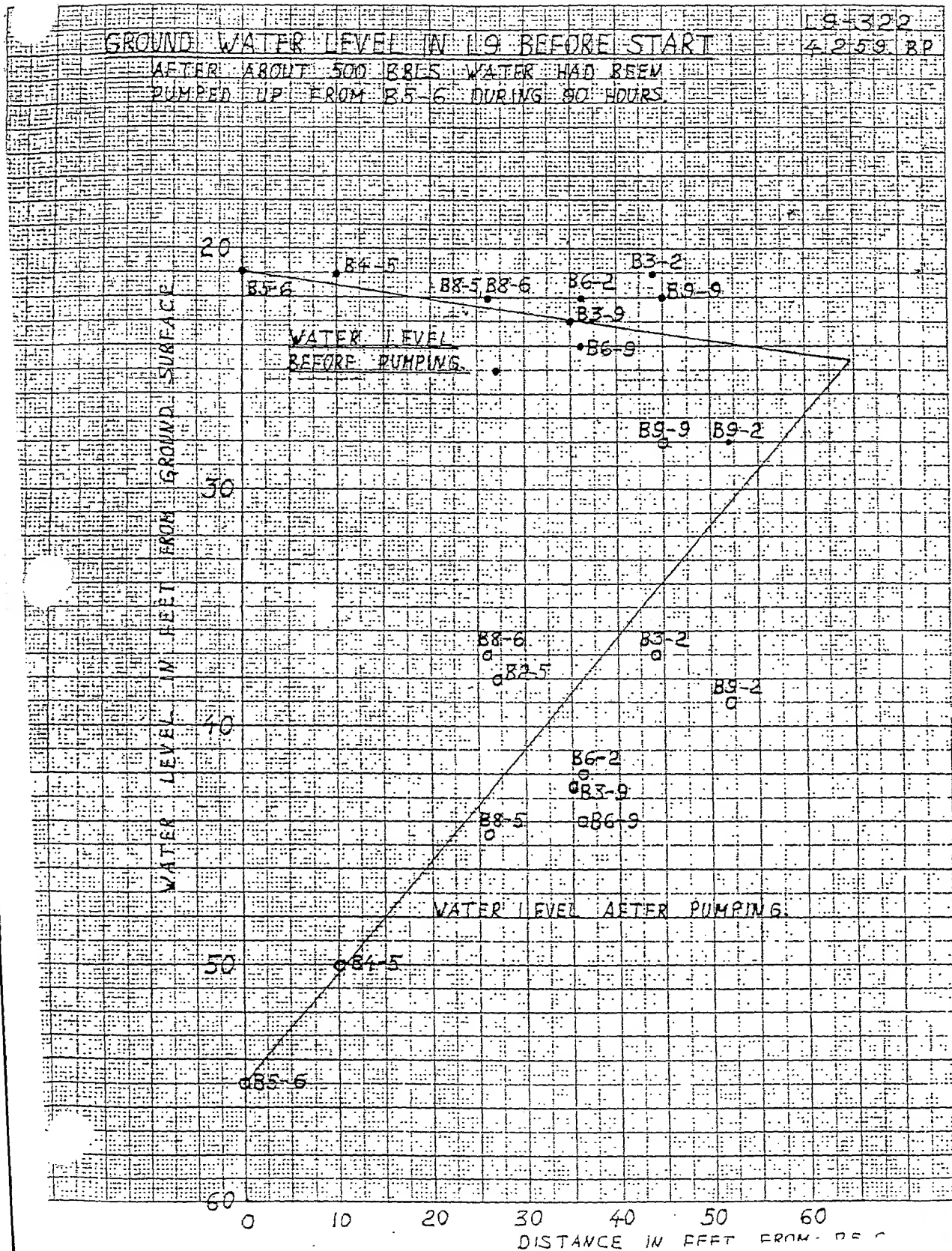
Figure 97

19 HEAT BALANCE



Total Heat Input (100%)

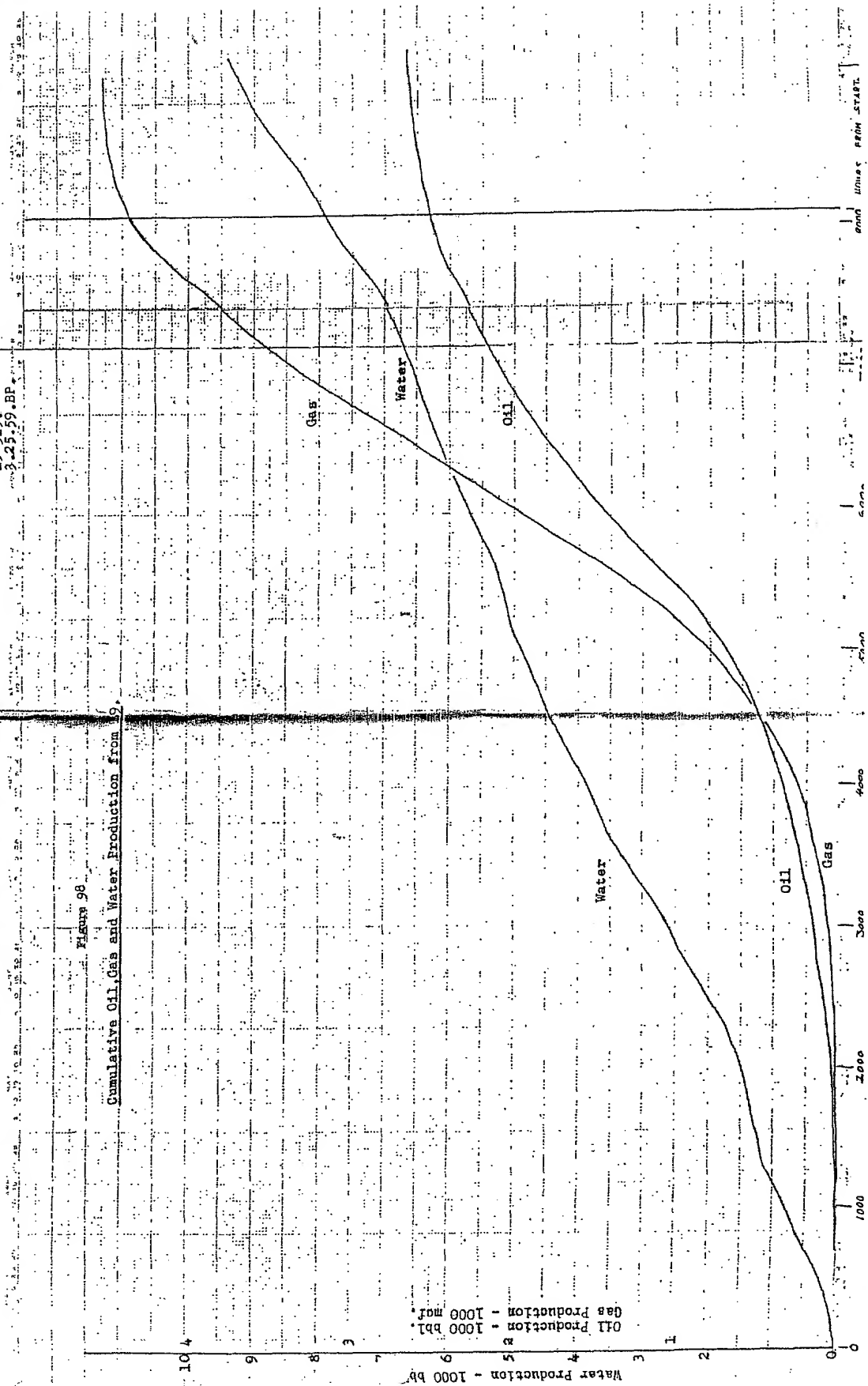
Figure 156

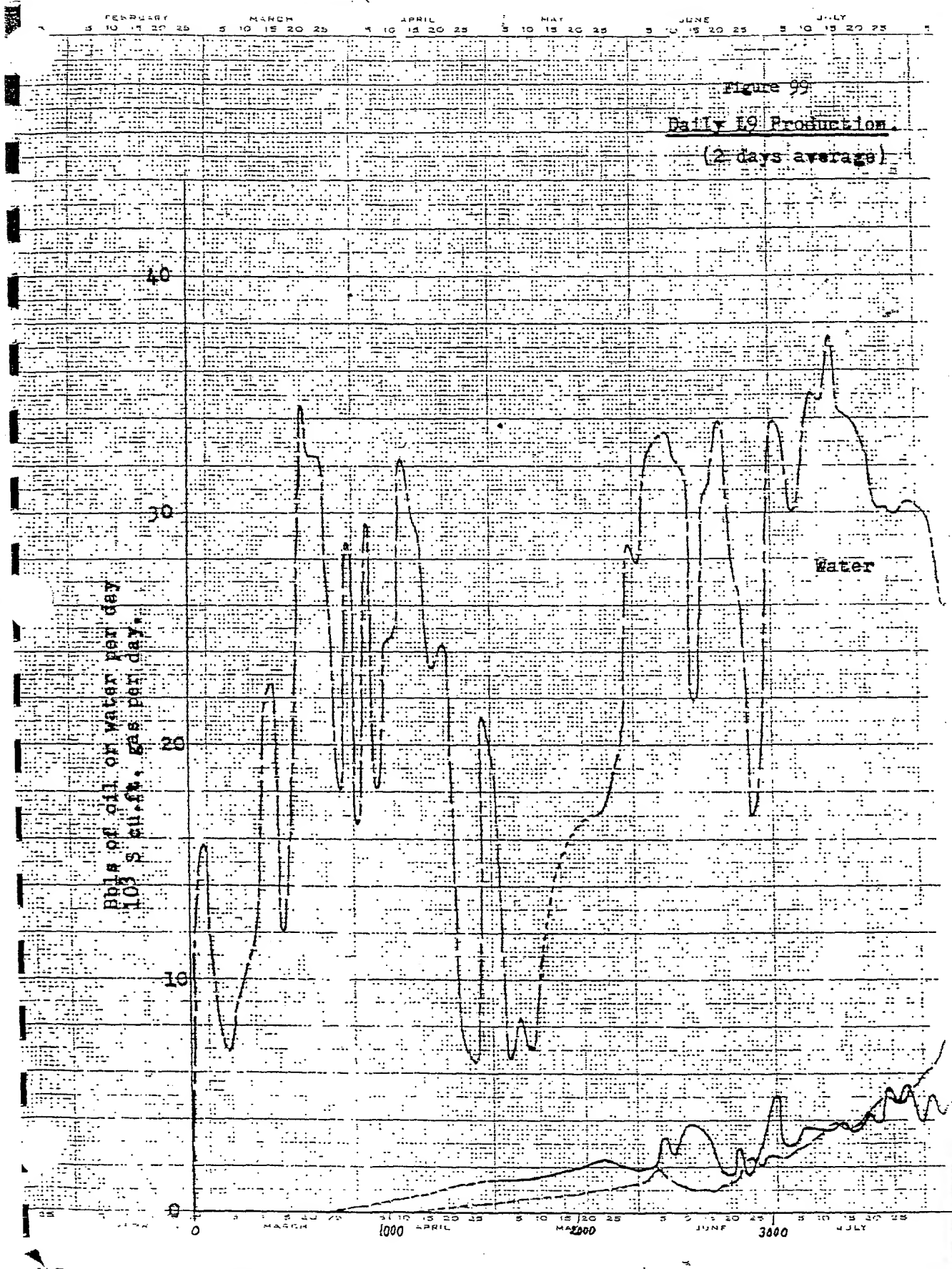


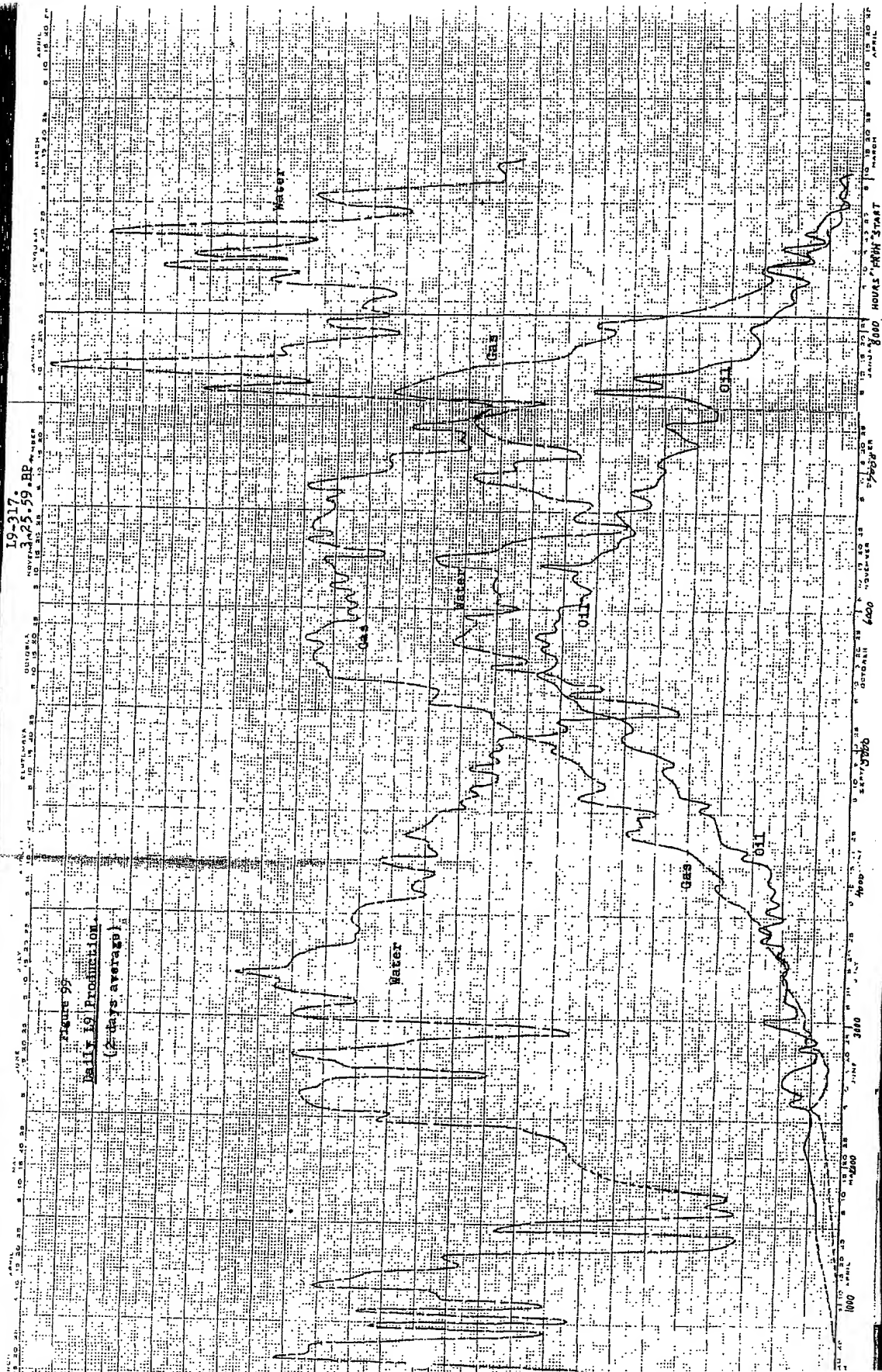
19-219
3-23-59.BP

Figure 98

Cumulative Oil, Gas and Water Production from 19



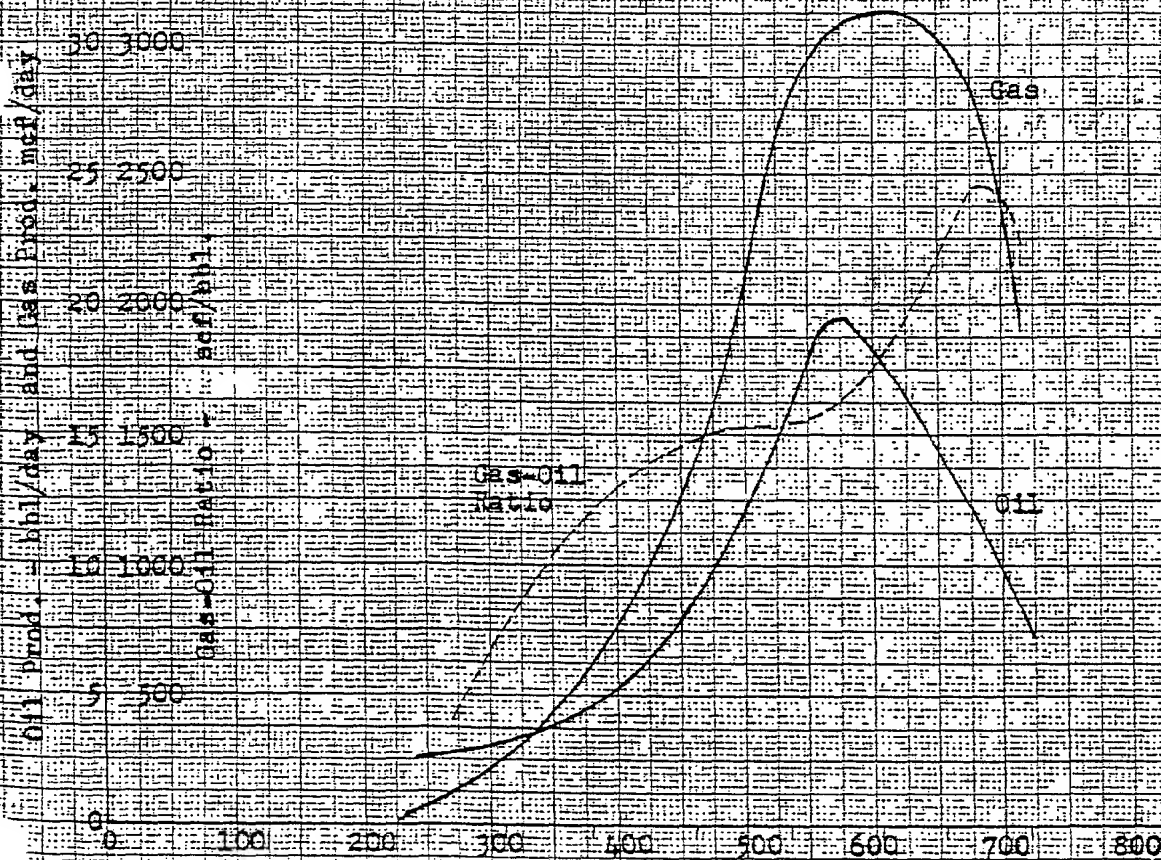




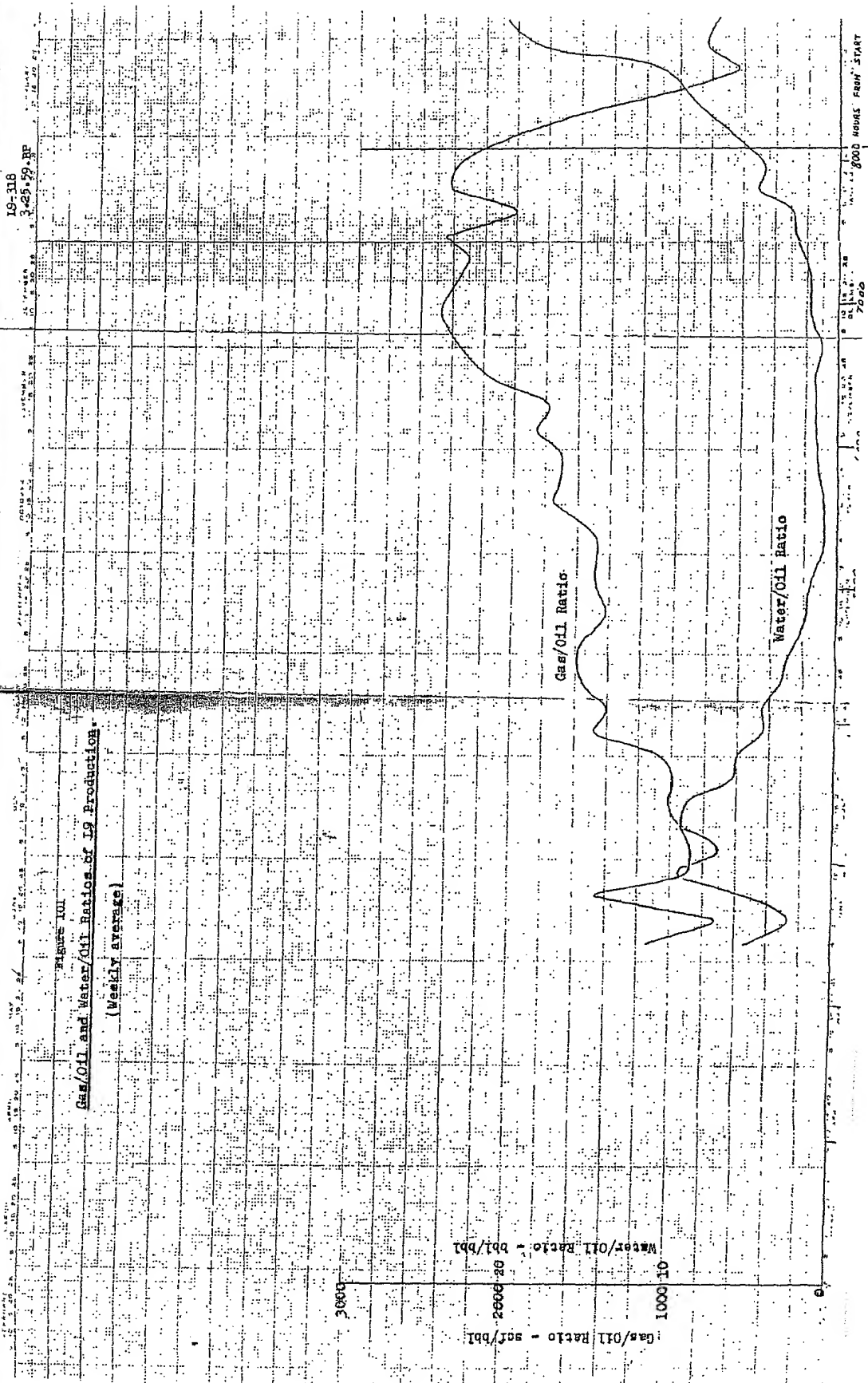
19-705
5-16-59 RH

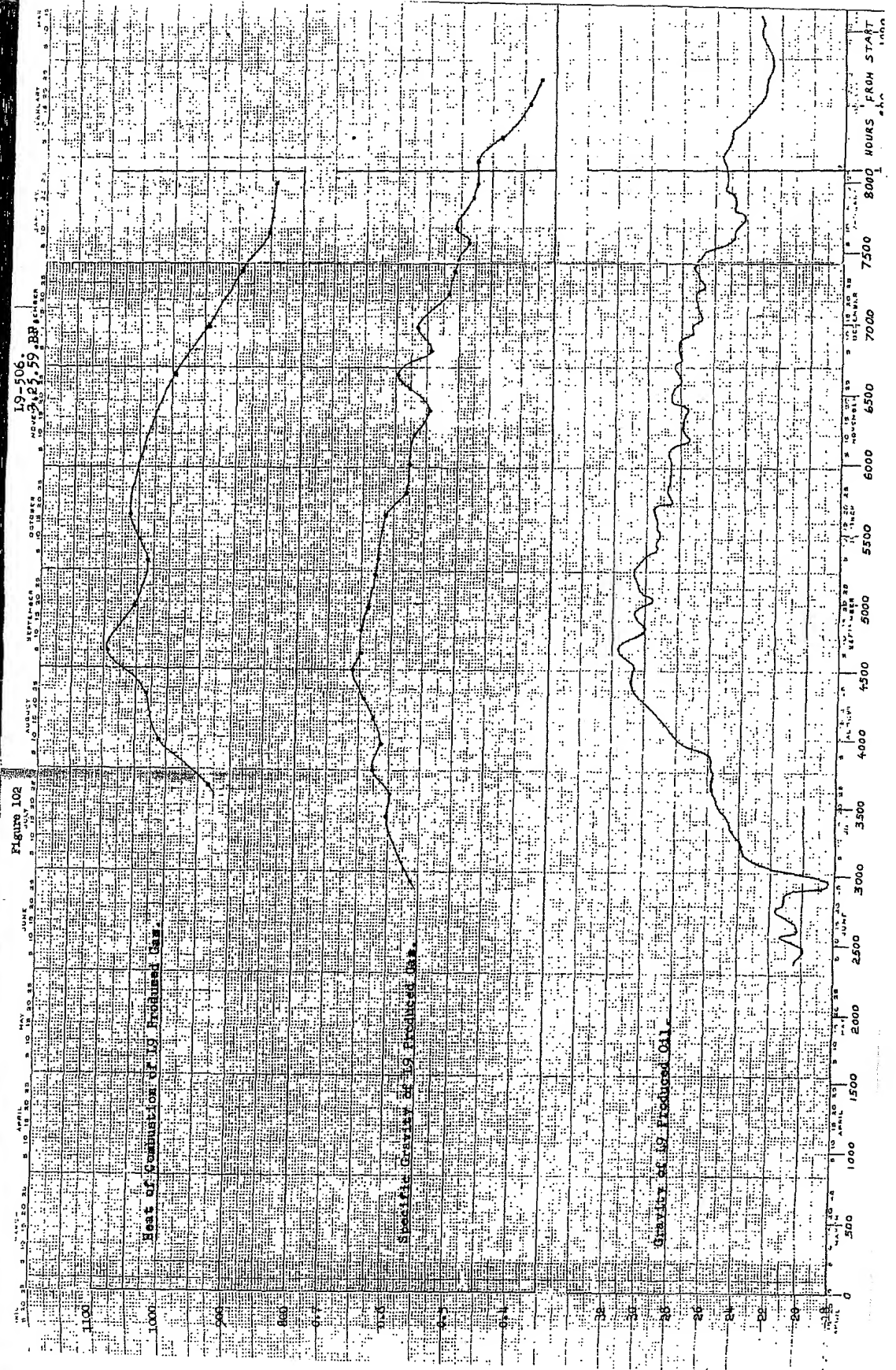
Figure 100

L9 PRODUCTION RATES VS. FORMATION TEMPERATURES



Average Temperature from 14 to 42 feet, Midway between burners - 21.

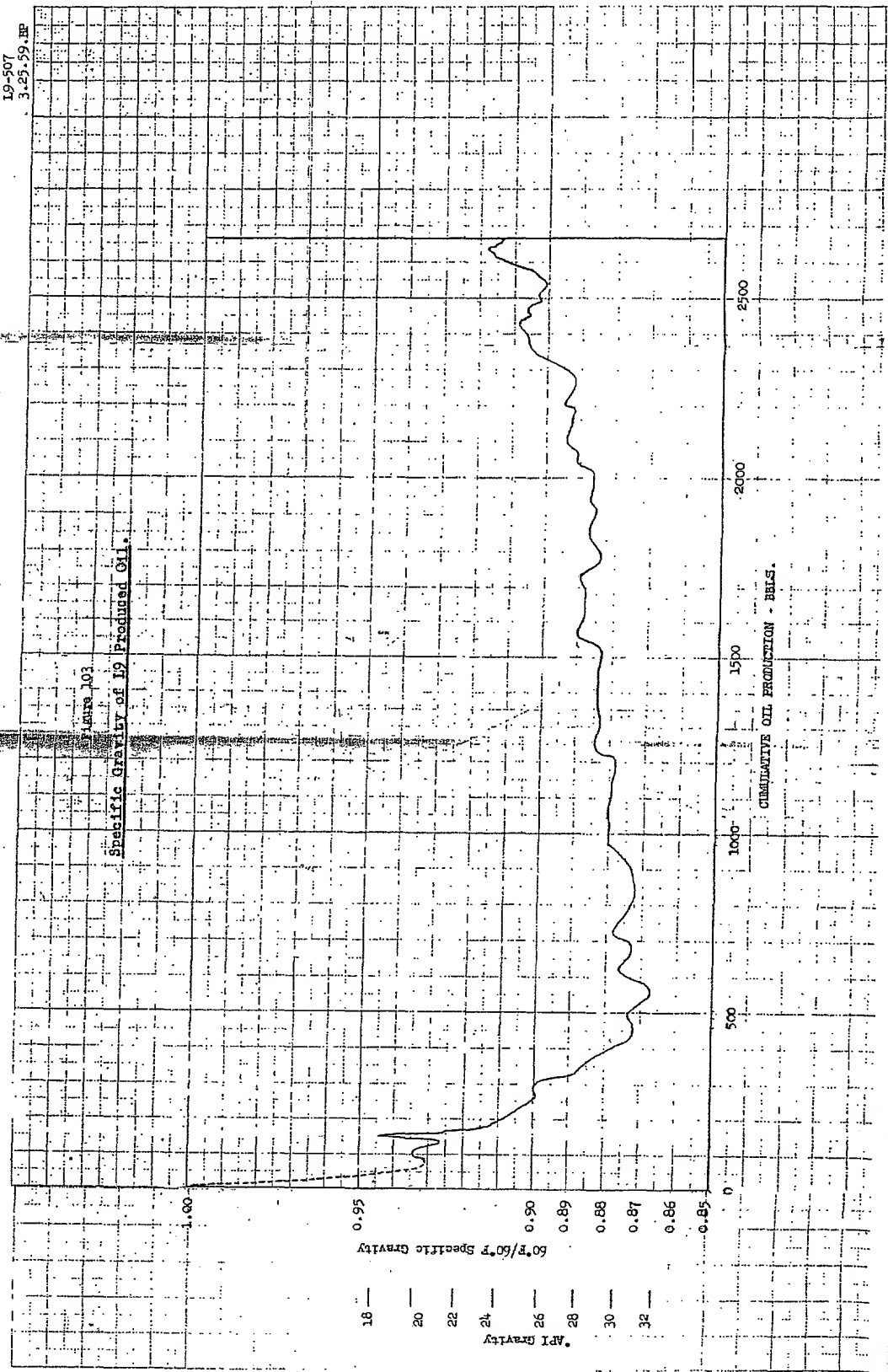




19-507
3-25-59 BP

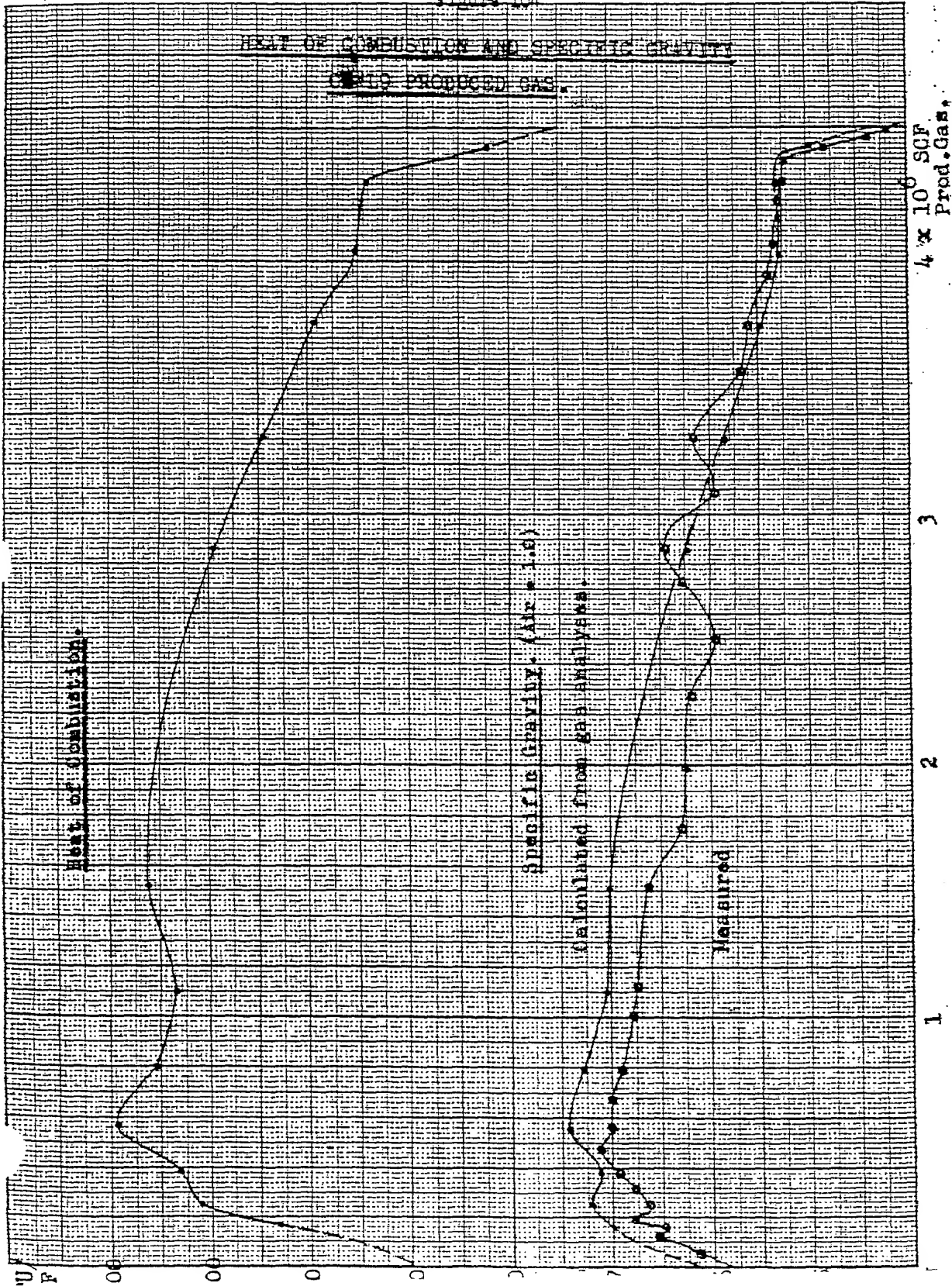
Figure 103

Specific Gravity of 19 Produced Oil.



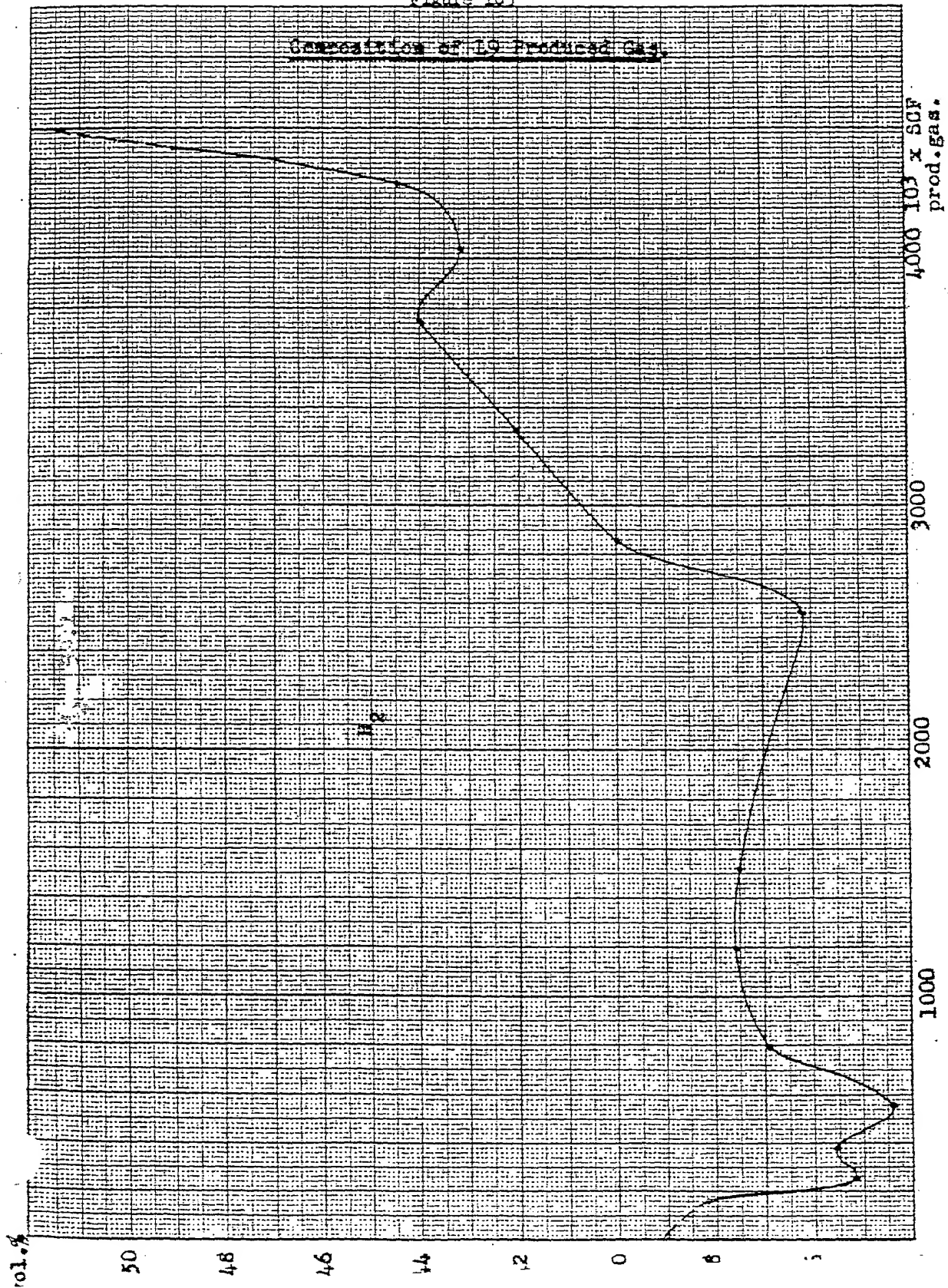
L9-509.
3.25.59.BP.

Figure 104



L9-508-1.
3.25.59.BP.

Figure 105



L9-508-2.
3.25.59.BP.

Figure 106

Composition of L9 Produced Gas.

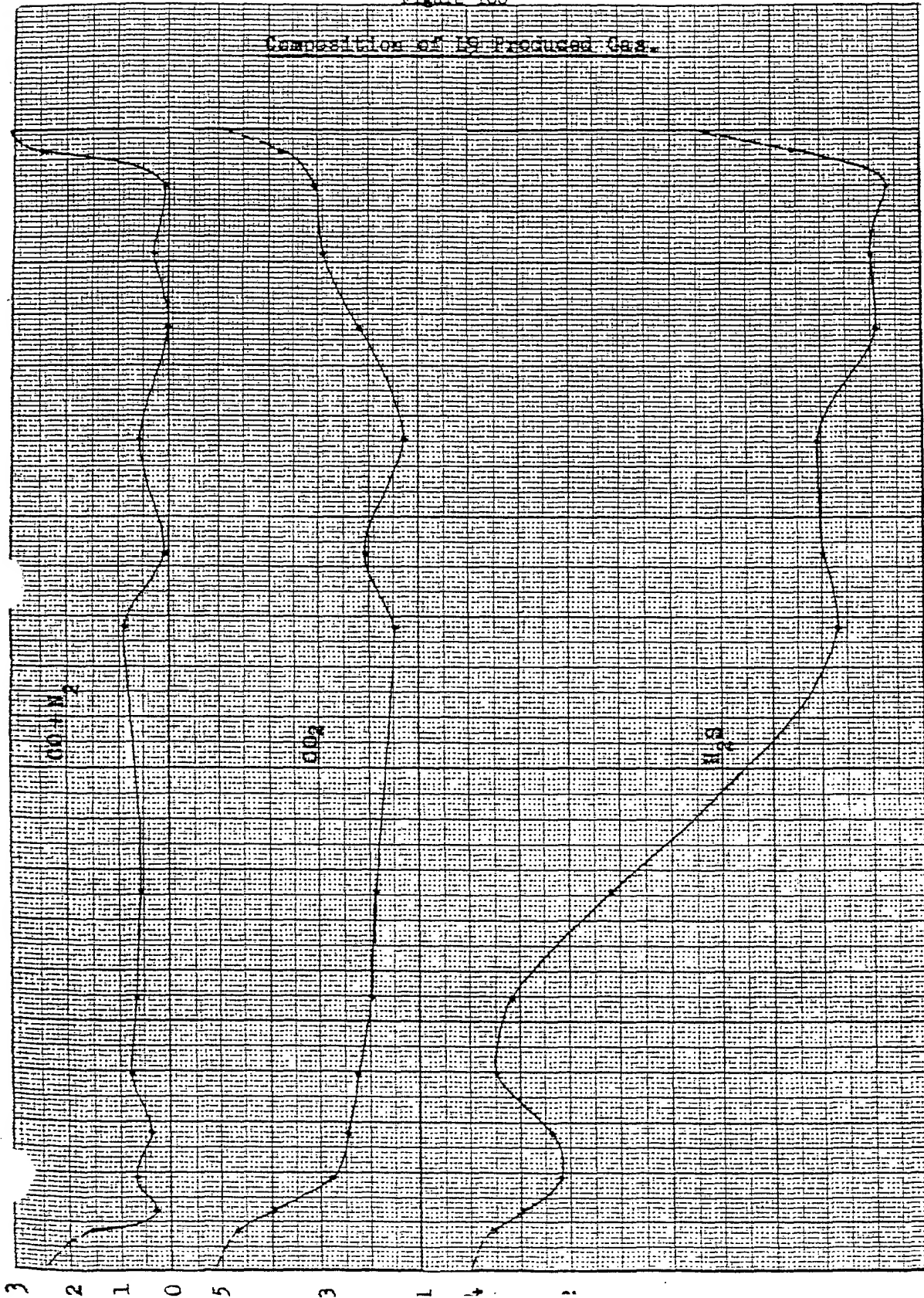
4000
3000
2000
1000
0
-1
-2
-3

prod. gas.

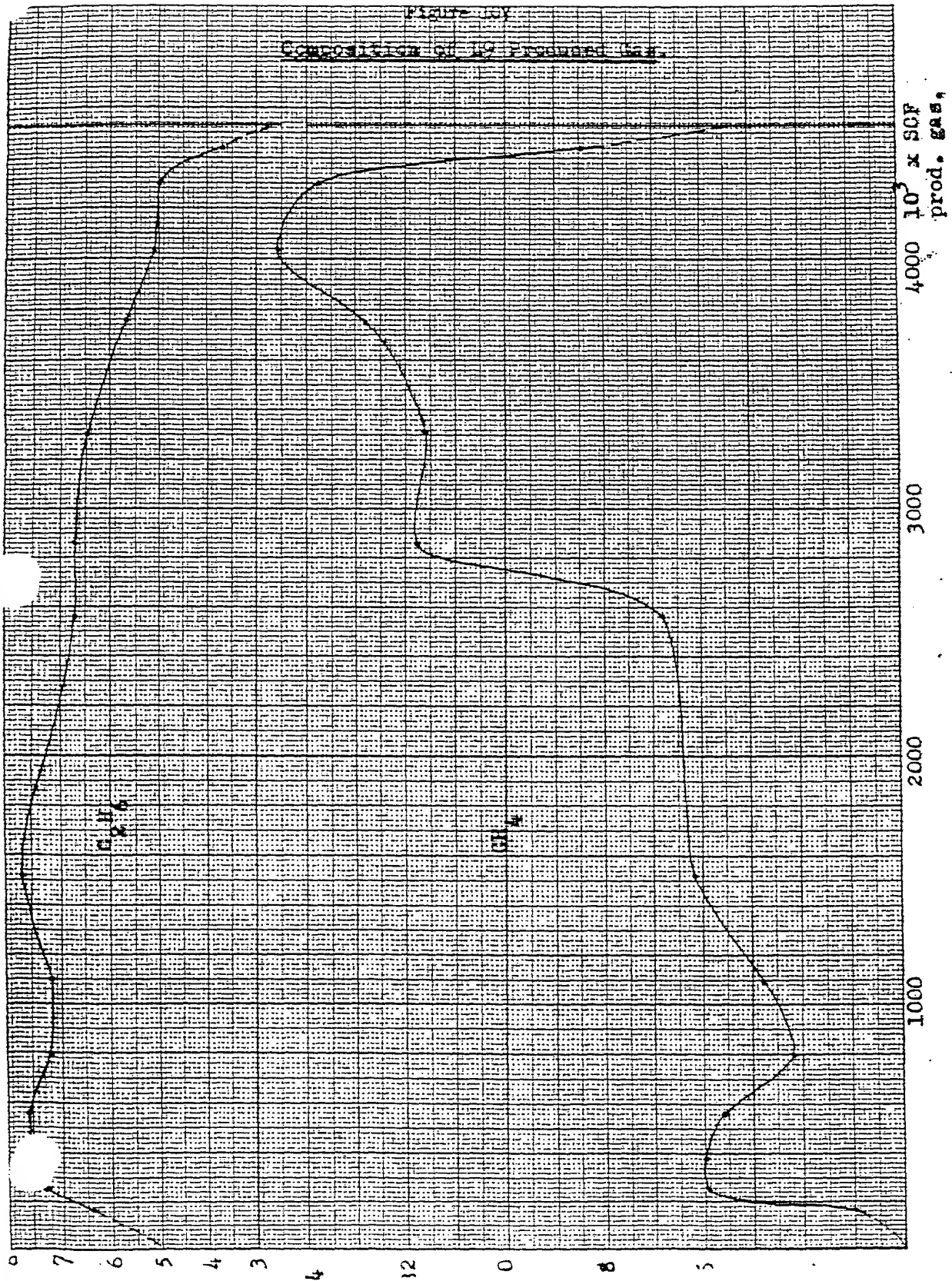
3000

2000

1000

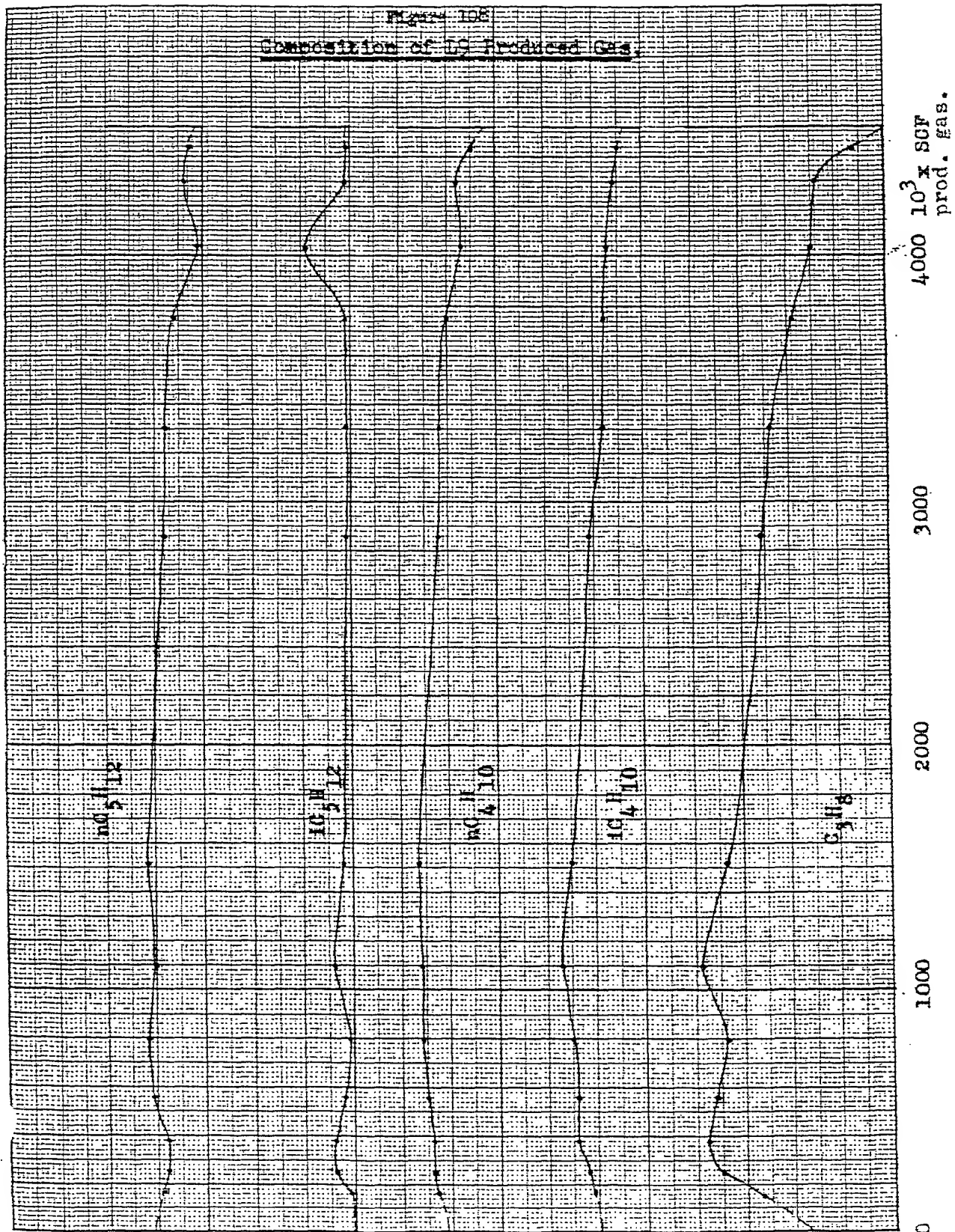


19-508-3.
3.25.59.BP.



L9-508-4.
3.25.59.BP.

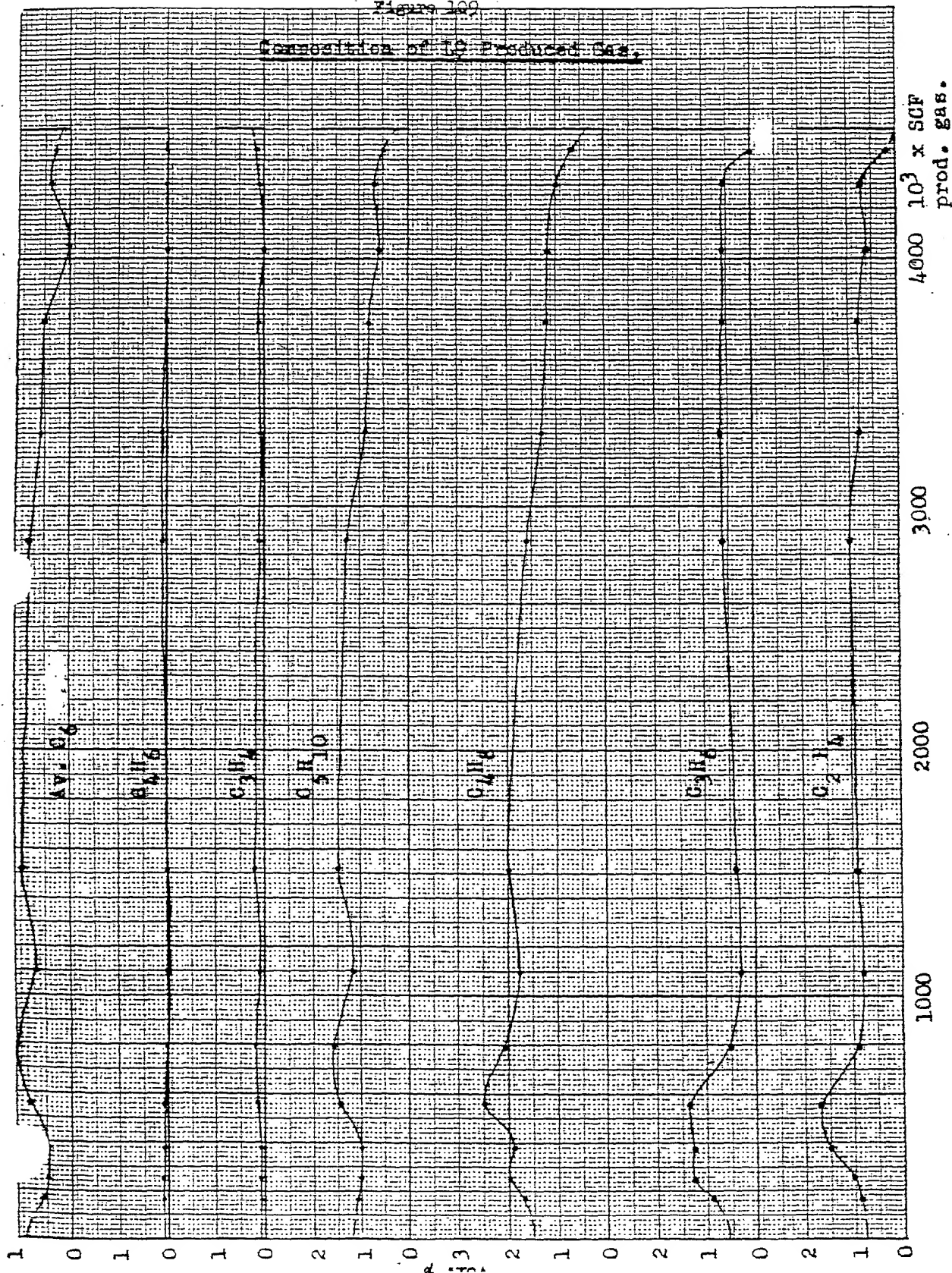
Figure 108
Composition of L9 Produced Gas.



L9-508-5.
3.25.59.BP.

Figure 109

Composition of L9 Produced Gas.



L9-101.
JAN. 21 1958. 89
REVISED 3-15-58. 21

- BURNER, 15' 5⁵/₈" AND 40' 4³/₄" HOLE, 52' 2¹/₂" CASING.
 ◎ CONCENTRIC GASWELL AROUND BURNER, 13' 4⁵⁰/₆₄" = 4²²/₃₂" CASING.
 • SEPARATE GASWELL IN BURNERHOLE, 15' 1¹/₂" CASING.
 ○ " " " 2' FROM ADJACENT BURNER, 20' 3³/₄" HOLE, 15' 1¹/₂" CASING.
 ⊖ " " " 5'9" " "
 ⊕ " " " 2' " " 50' 3³/₄" HOLE FILLED WITH GRAVEL TO 15'. 15' 1¹/₂" CASING.
 ⊖ " " " 5'9" " "
 ○ CONCENTRIC GASWELL AROUND WATER WELL, 15' 4⁵⁰/₆₄" = 4²²/₃₂" CASING.
 ◎ WATER WELL, 5'9" FROM ADJ. BURNER, 55' 5⁵/₈" HOLE, 50' 1¹/₂" TUBING W56; 75' 5⁵/₈" HOLE, 40' 3¹/₂" AND 10' 4" TUBING.
 • TEMPERATURE WELL, 5'9" FROM ADJACENT BURNER, 55' 3³/₄" HOLE, 52' 2" CASING.
 • " " " IN BURNERHOLE, 52' 1" CASING.
 ⊖ " " " 3' (T49B 4') FROM ADJACENT BURNER, 55' 3³/₄" HOLE, 52' 2" CASING.

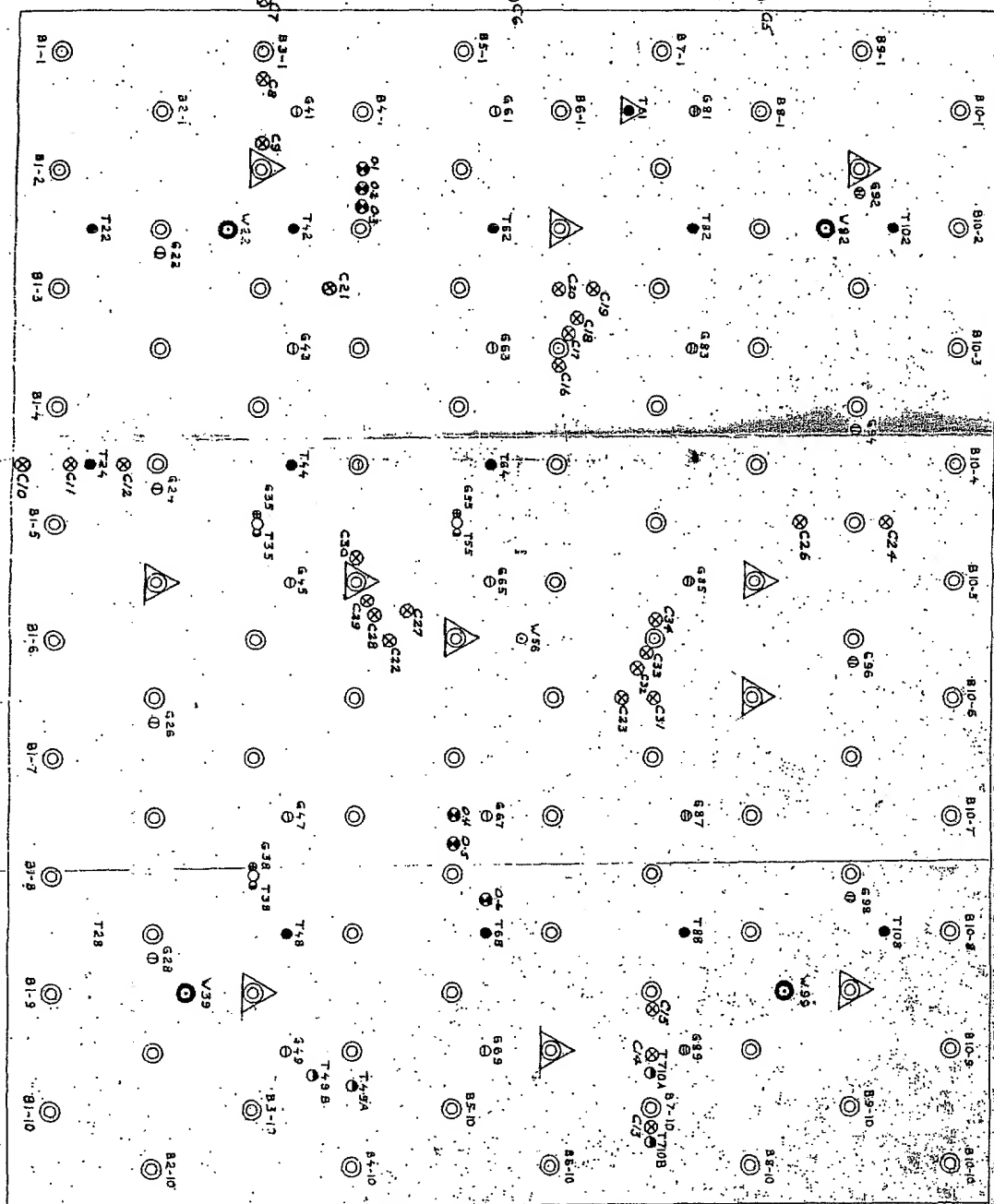


Figure 110
L9 CORE HOLE LOCATIONS
CORED BEFORE TEST CORED AFTER TEST OVERBURDEN CORES AFTER TEST
L9-218
5126.8538

L9 CORE HOLE LOCATIONS

Figure 110

<u>Core Hole No.</u>	<u>Locations</u>
C1	10' N. of B7-10 then 1' west
C2	10' N. of B5-10 then 4' - 4" west
C3	7' N. of C2
C4	10' N. of B3-10 then 2' - 4" east
C5	10' S. of B8-1
C6	10' S. of B6-1 then 4' - 4" east
C7	5' S. of B3-1
C8	2' N. of B3-1 (between B3-1 and B3-2)
C9	2'-3-1/2" S. of B3-2 (-")
C10	11'-5-1/2" E. of B2-4
C11	7'-10-1/2" E. of B2-4
C12	3'-8" E. of B2-4 (between B2-4 and T24)
C13	1'-5" N. of B7-10
C14	4'-6" S. of B7-10 (between B7-10 and B7-9)
C15	1'-1-1/2" N. of B7-9 (-")
C16	10" N. of B6-3
C17	1'-5" from B6-3 towards B7-2
C18	2'-11" " " " "
C19	5'-9" " " " " (between B6-2, 6-3, 7-3)
C20	5' S. of B6-3 (between B6-2 and B6-3)
C21	Midway between B3-3, B4-2, and B4-3
C22	" " B4-5, B4-6, and B5-6
C23	" " B6-6, B7-6, and B7-8
C24	2'-5-1/2" west of B9-5
C25	3'-5" east of B9-5

L9 CORE HOLE LOCATIONS
Figure 110

<u>Core Hole</u> <u>No.</u>	<u>Locations</u>
C26	4'-5" east of B9-5
C27	5' from B4-5 between B4-5 and B5-6
C28	2'-11" from B4-5 towards B5-7
C29	1'-5" " " " "
C30	11" " " " B4-4
C31	5' from B7-6 between B7-6 and B7-7
C32	2'-11" from B7-6 towards B6-7
C33	1'-5" " " " "
C34	10" to 12" from B7-6 towards B7-5
C35	14'-7-1/2" east of B2-4

Figure 111

L9-215-1
5-19-59 RH

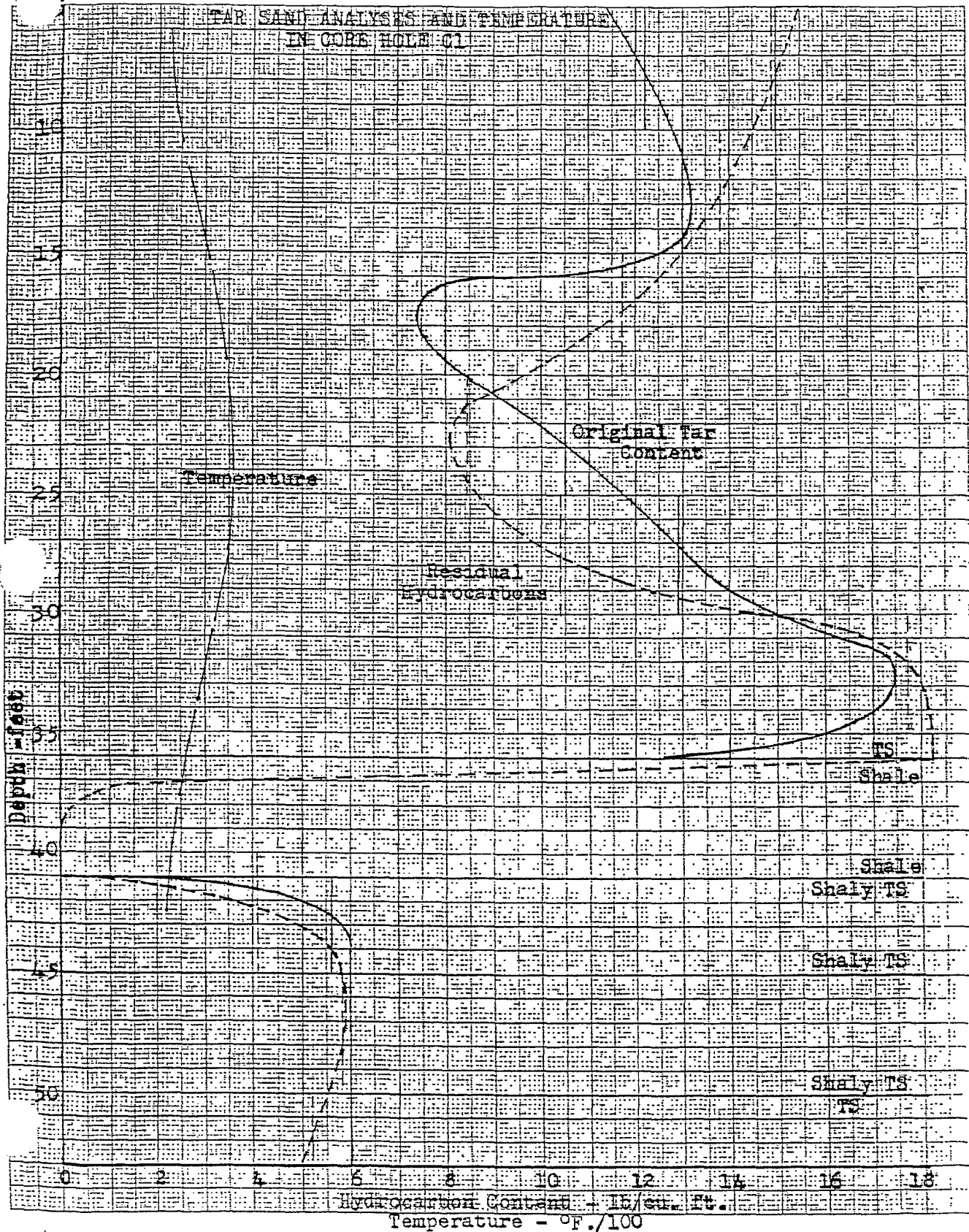


Figure 112

L9-215-2
5-21-59 RH

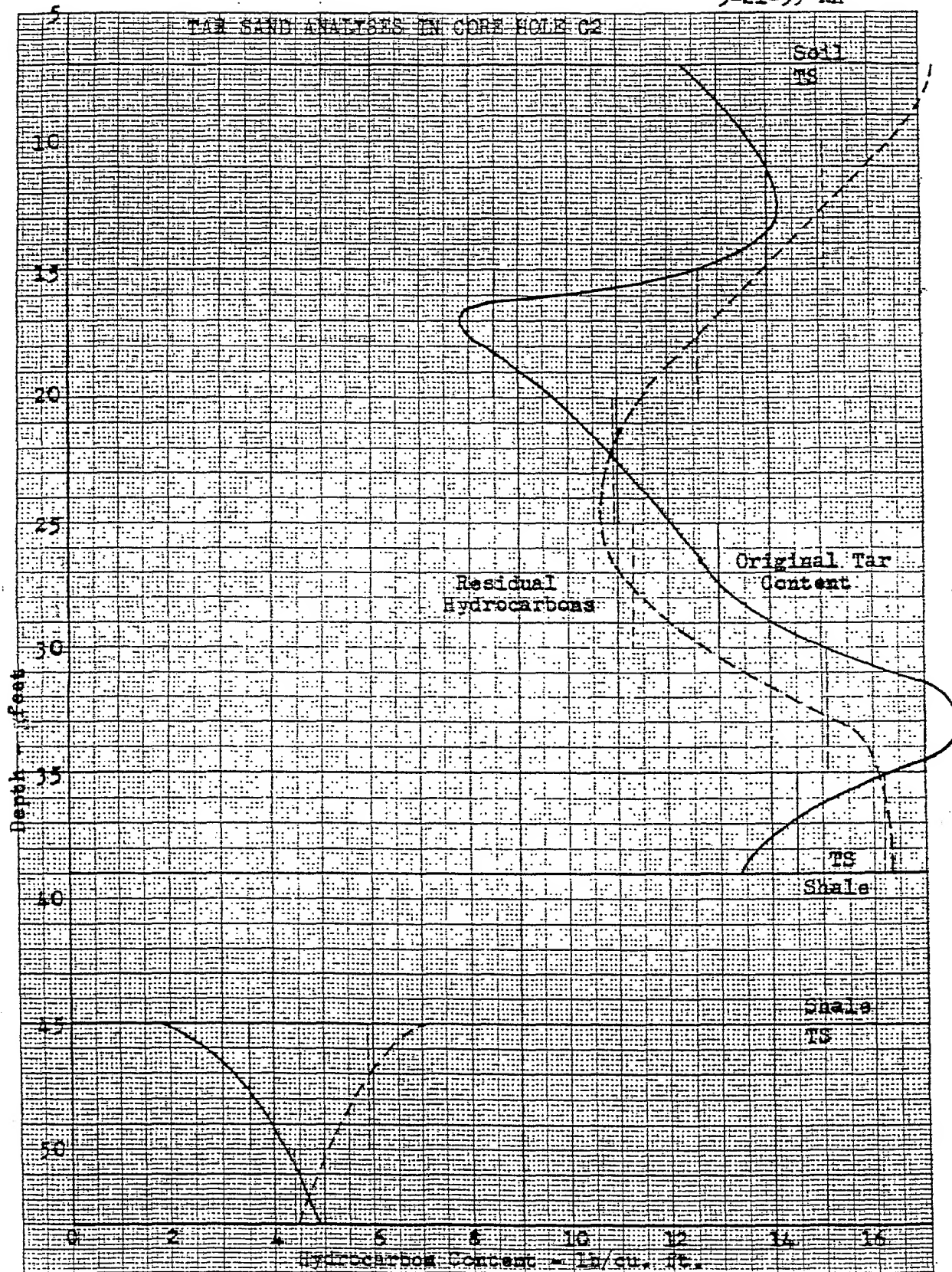


Figure 113

TAR SAND ANALYSES IN CORE HOLE C3

L9-215-3

5-21-59 RH

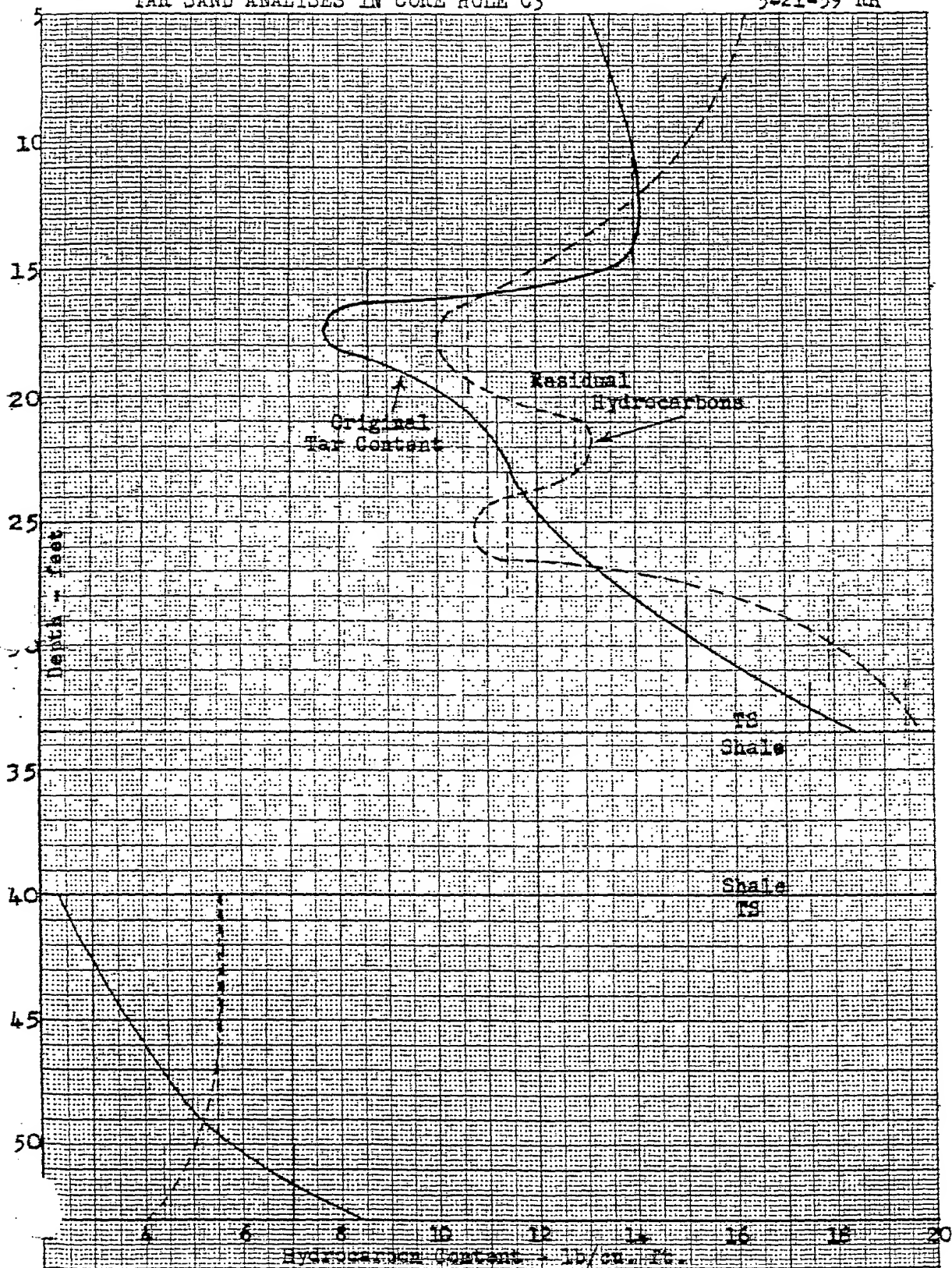
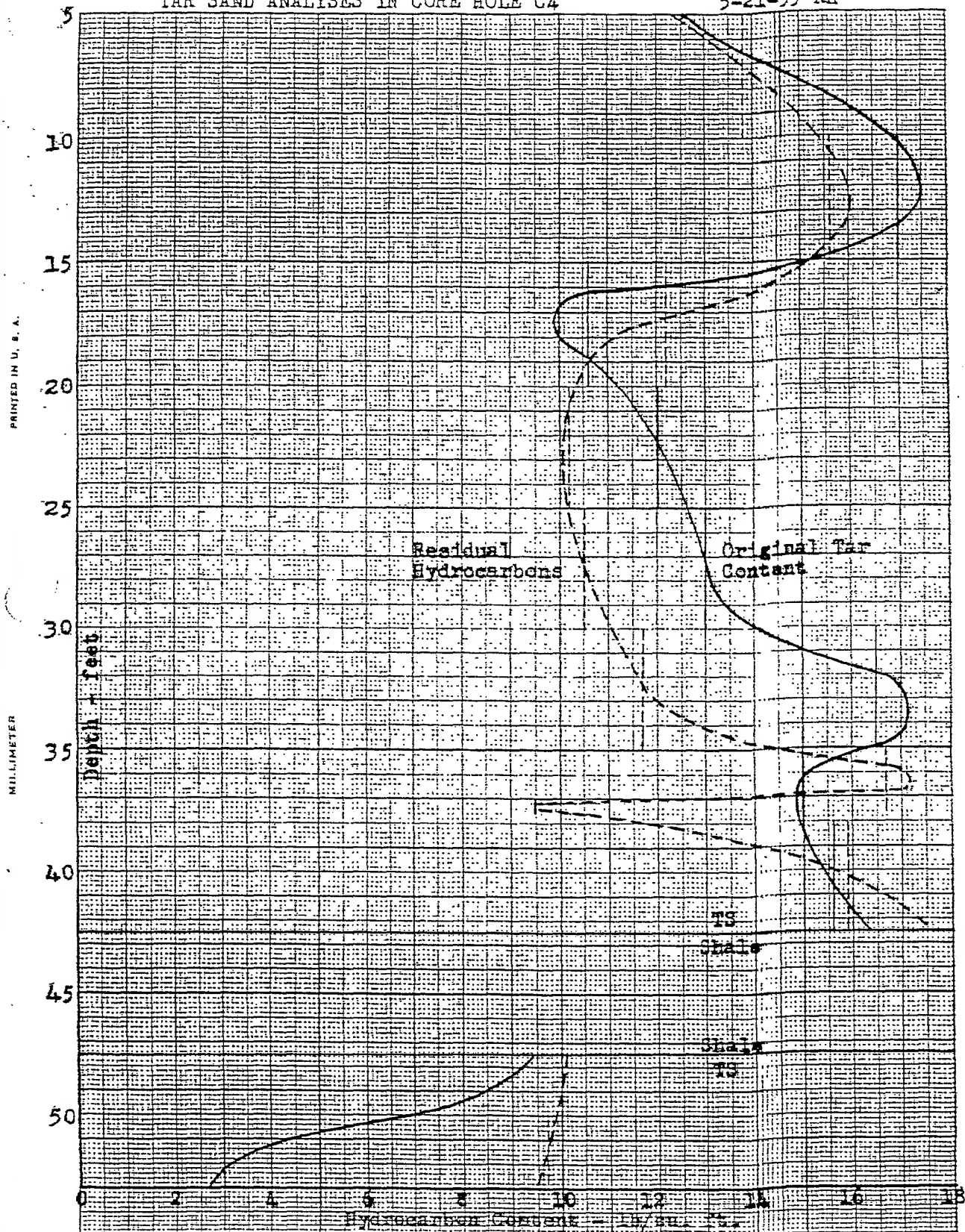


Figure 114

TAR SAND ANALYSES IN CORE HOLE C4

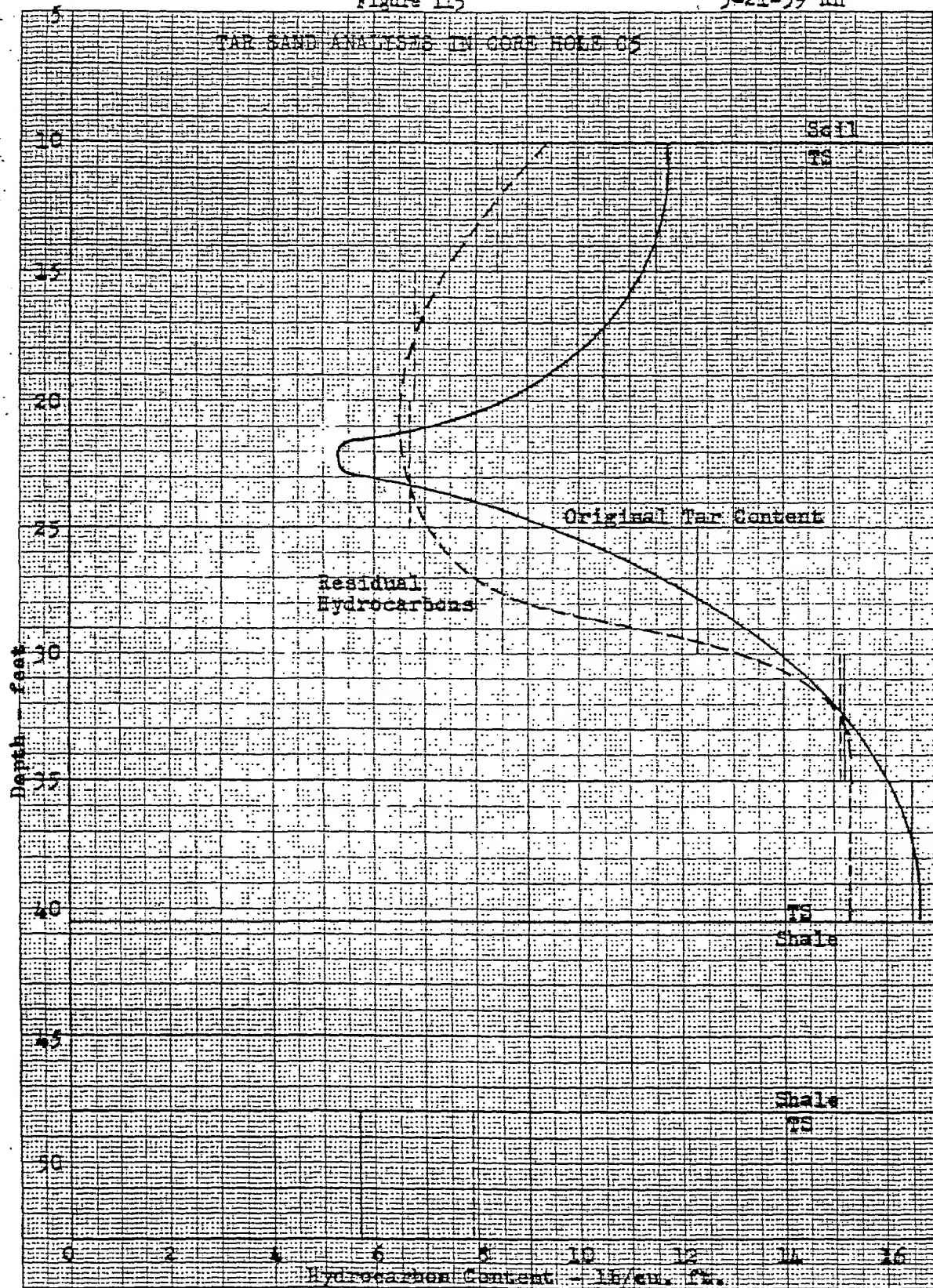
L9-215-4
5-21-59 RH



L9-215-5
5-21-59 RH

Figure 115

TAR SAND ANALYSIS IN CORE HOLE C5



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MILLIMETER

Figure 116

L9-215-6
5-21-59 RH

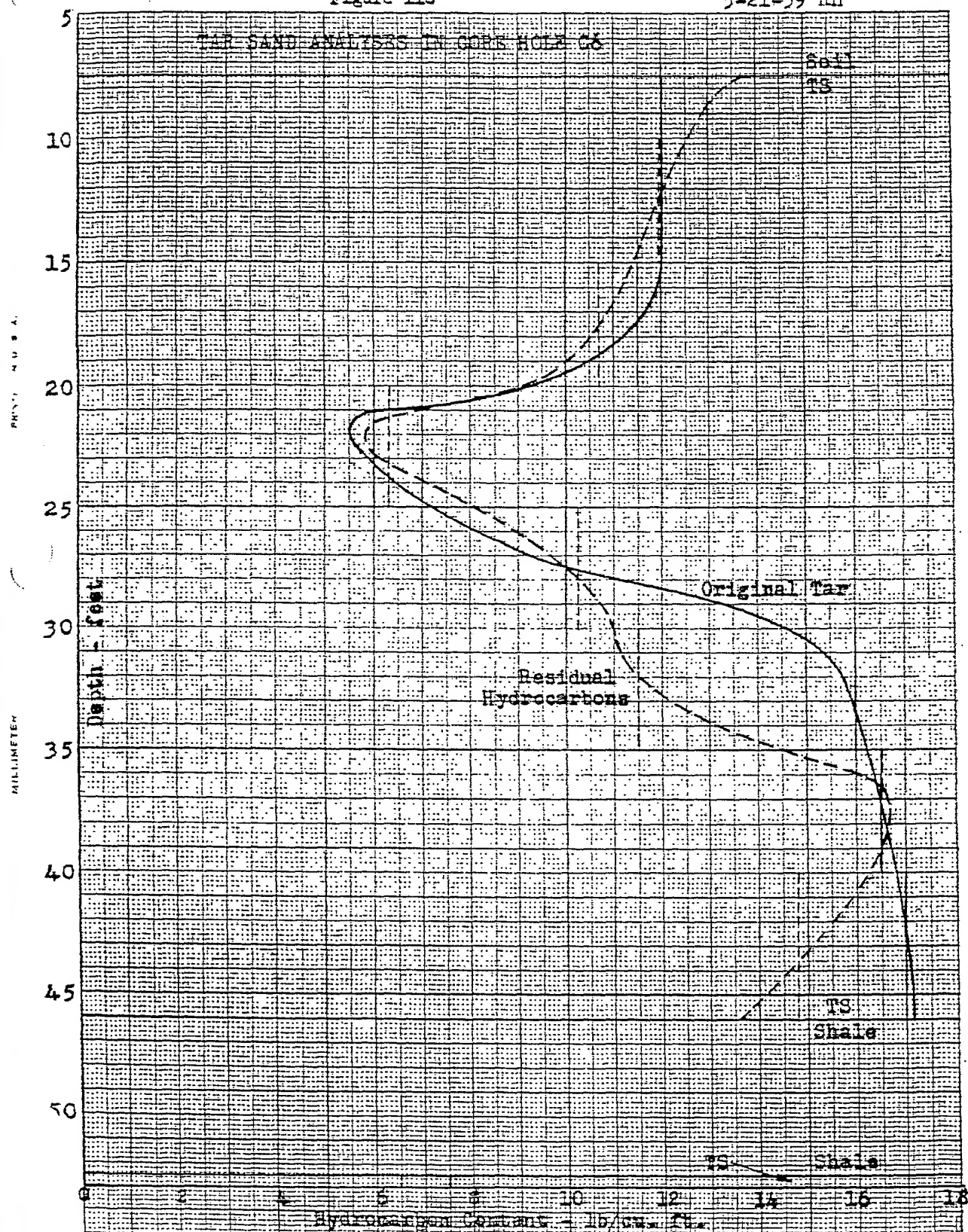


Figure 117

L9-215-7
5-21-59 RH

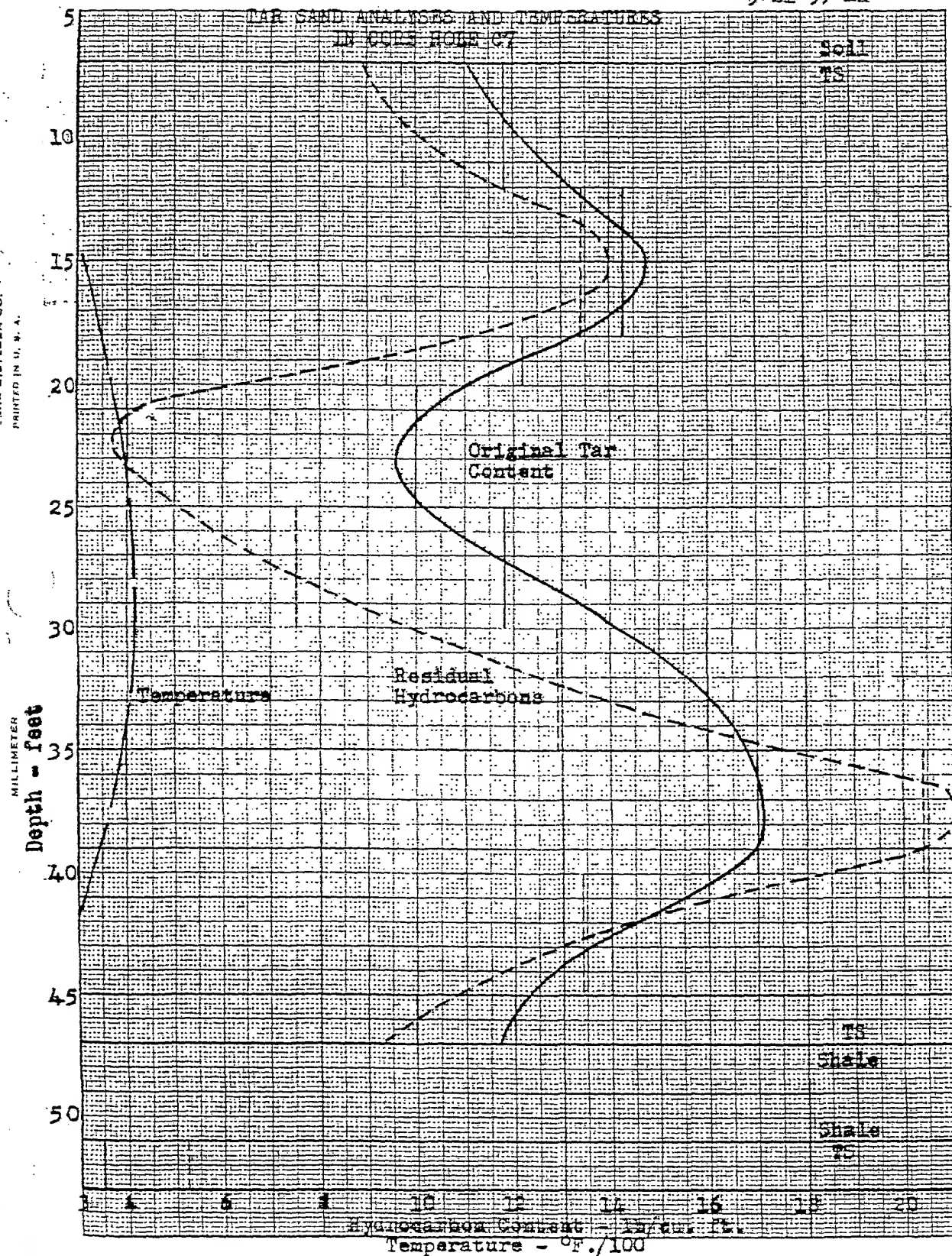


Figure 118

L9-215-8
5-21-59 RH

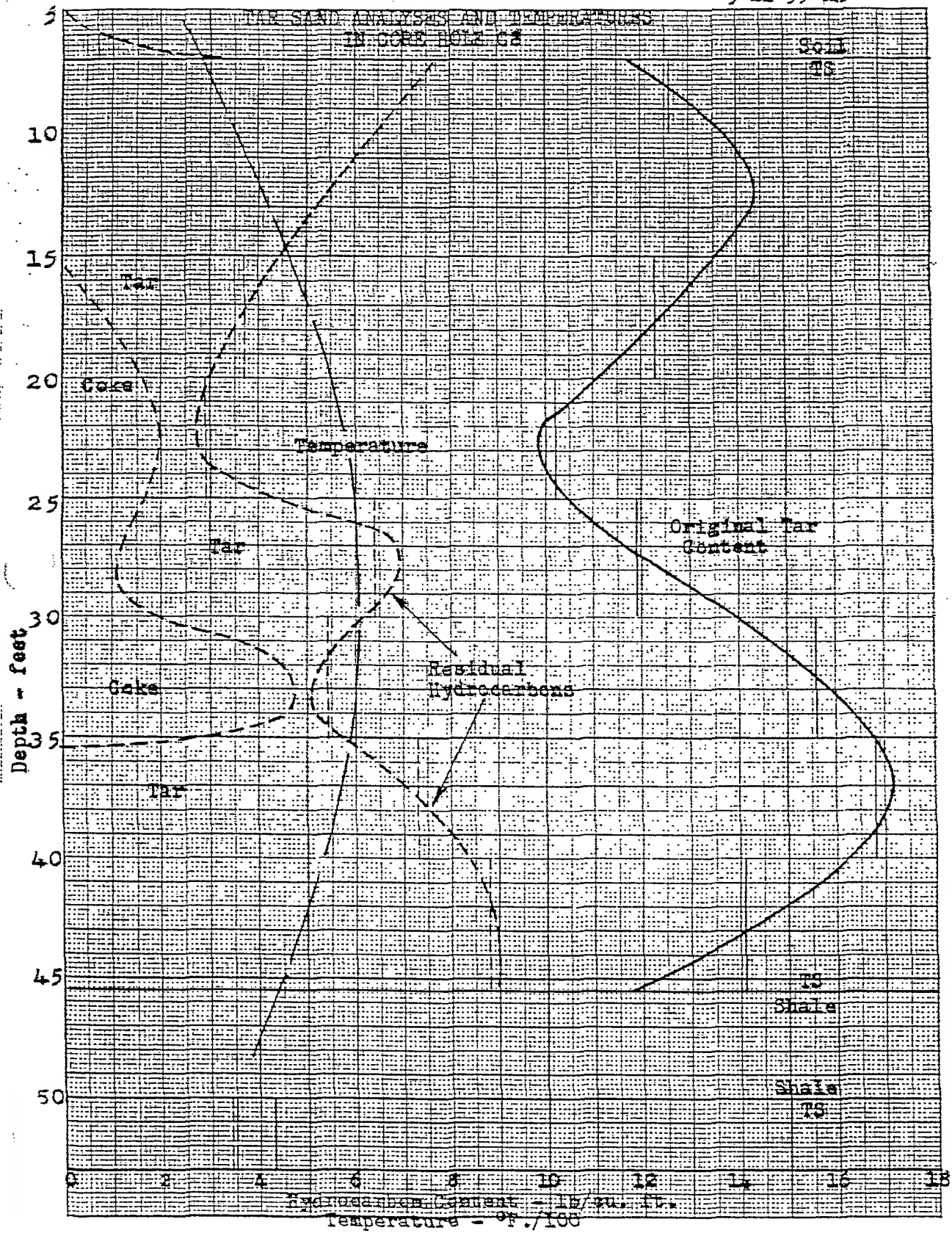
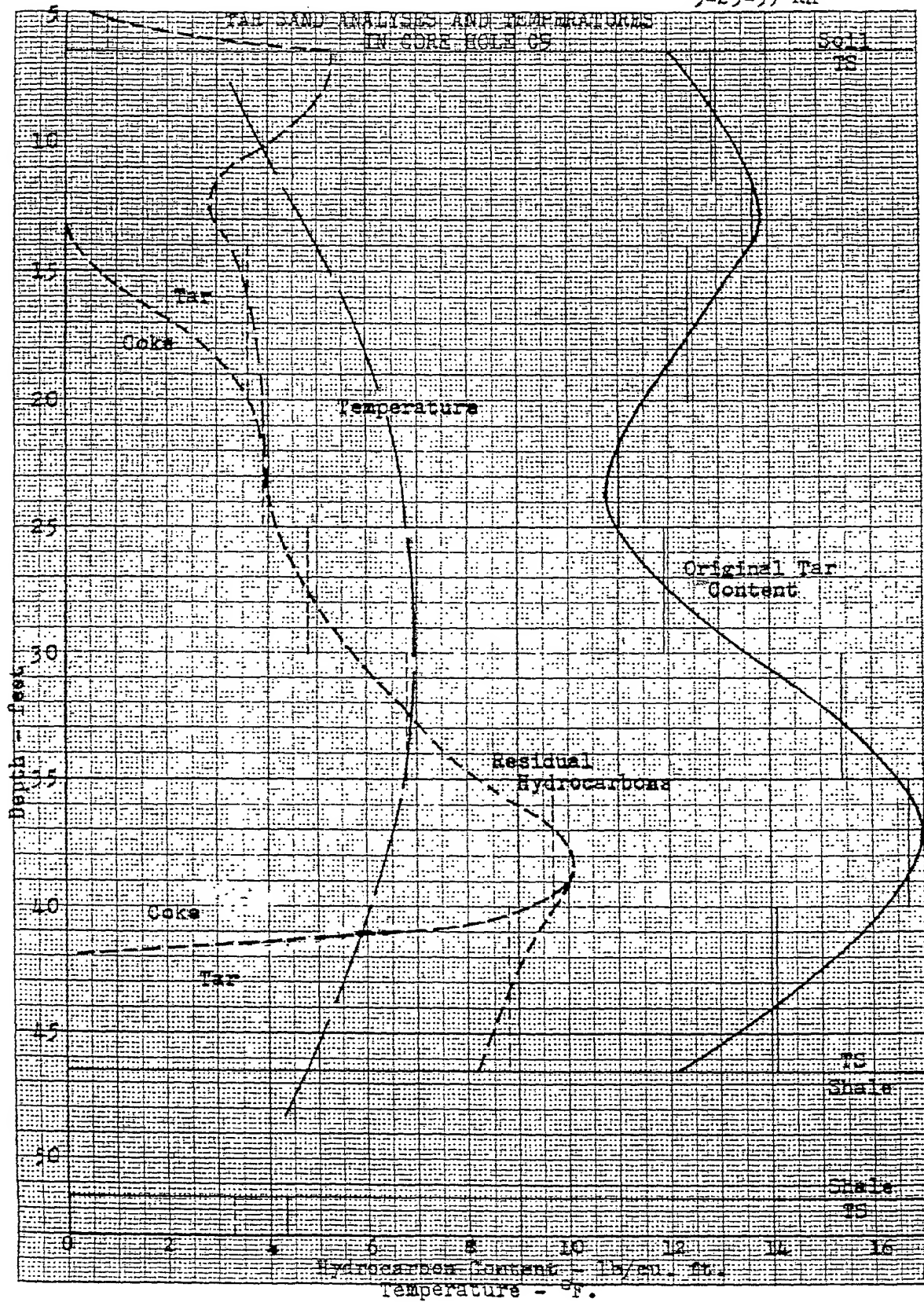


Figure 119

L9-215-9
5-25-59 RH



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Figure 120

L9-215-10
5-19-59 RH

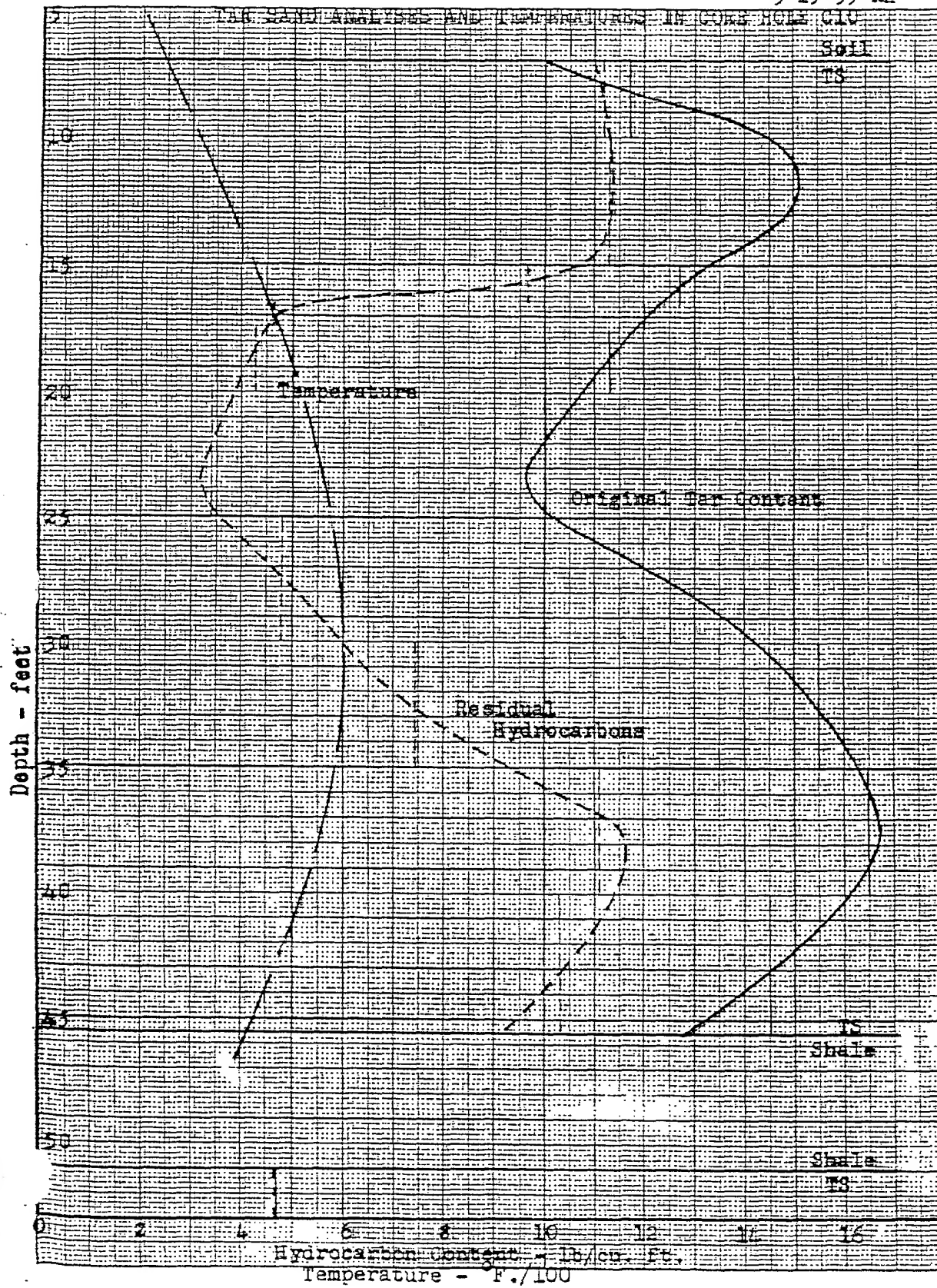


Figure 121

L9-215-11
5-19-59 RH

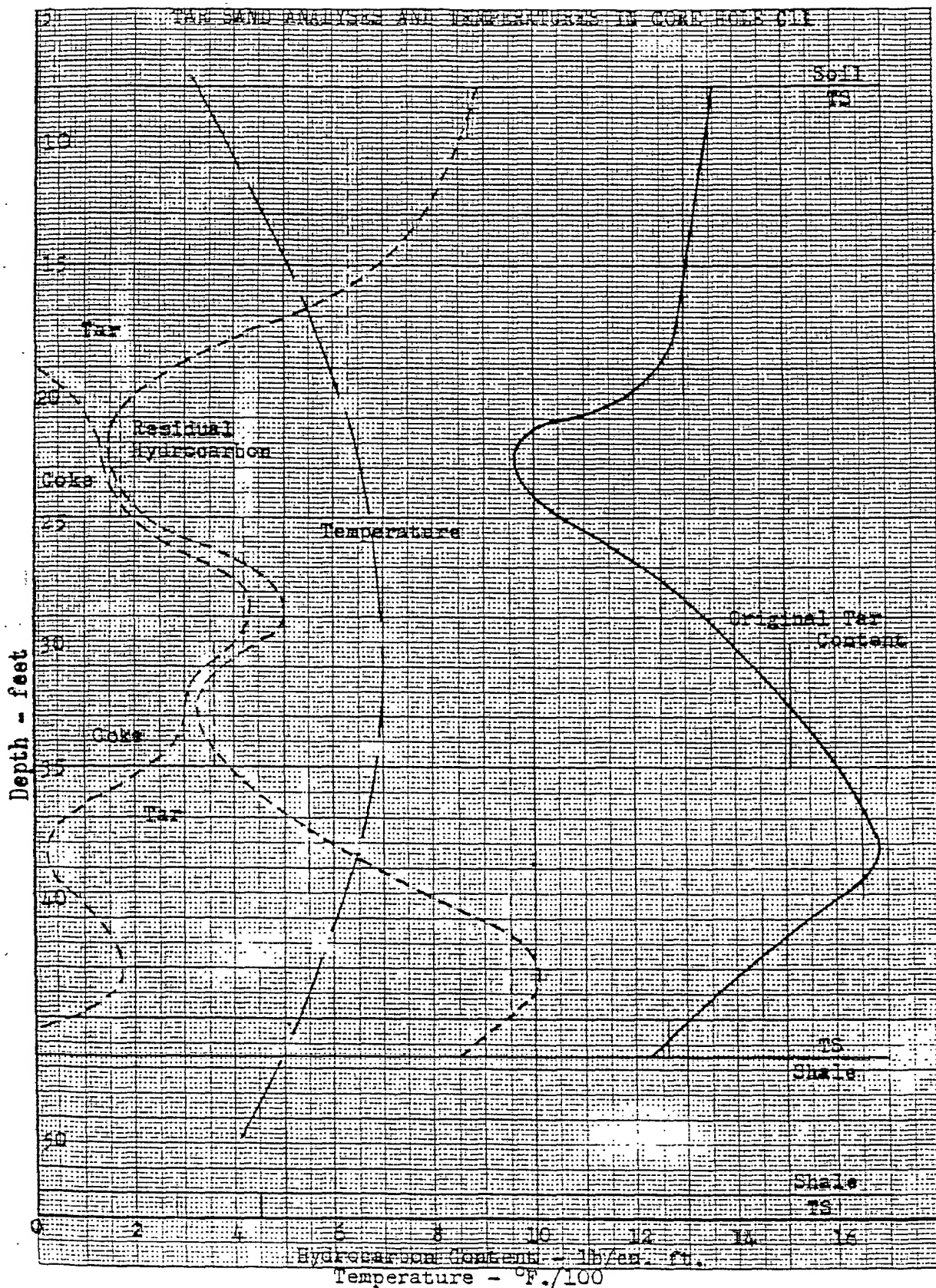
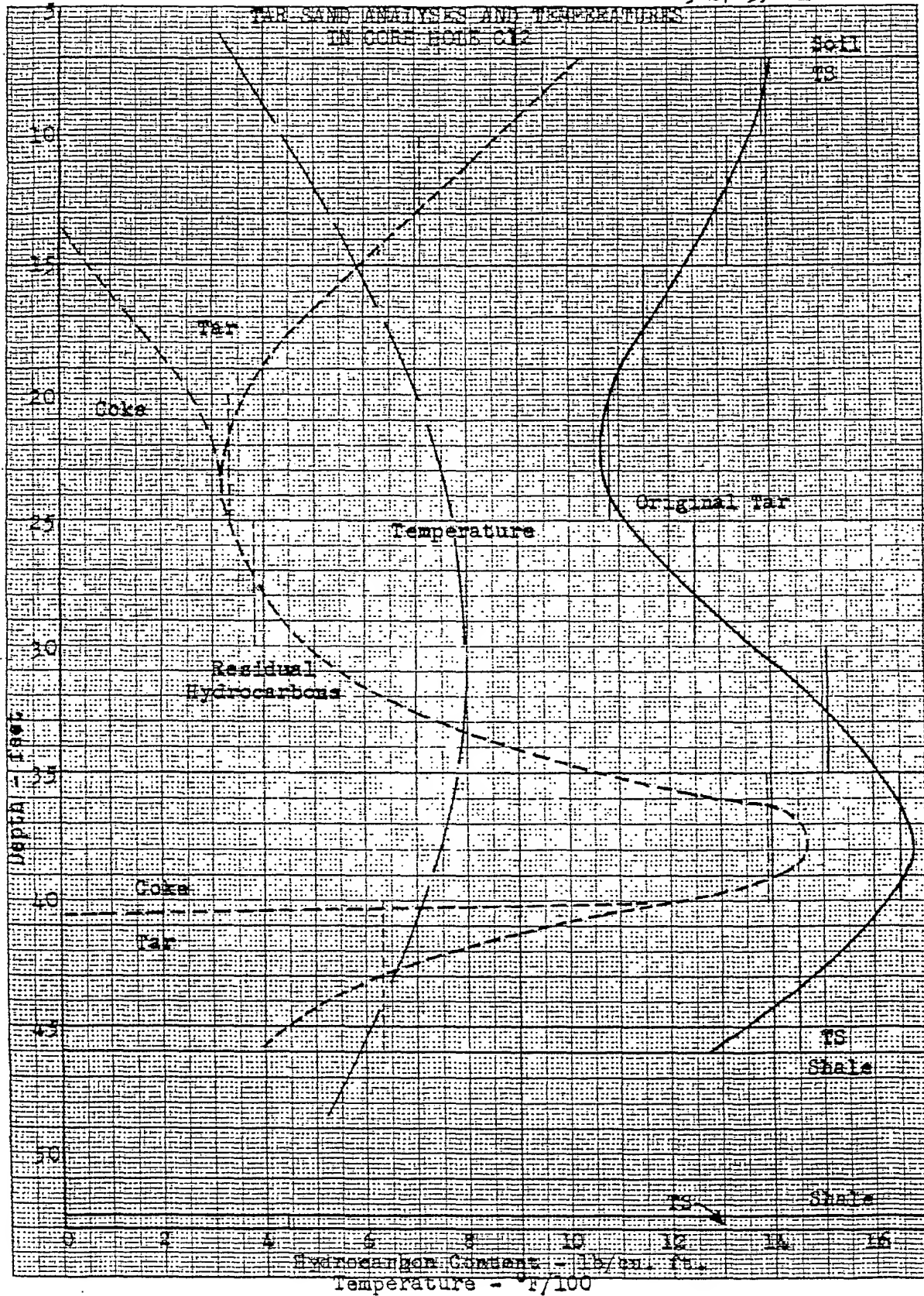


Figure 122

L9-215-12
5-27-59 RH



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MILLIMETER

Figure 123
TAR SAND ANALYSES AND TEMPERATURES

L9-215-13
5-19-59 RH

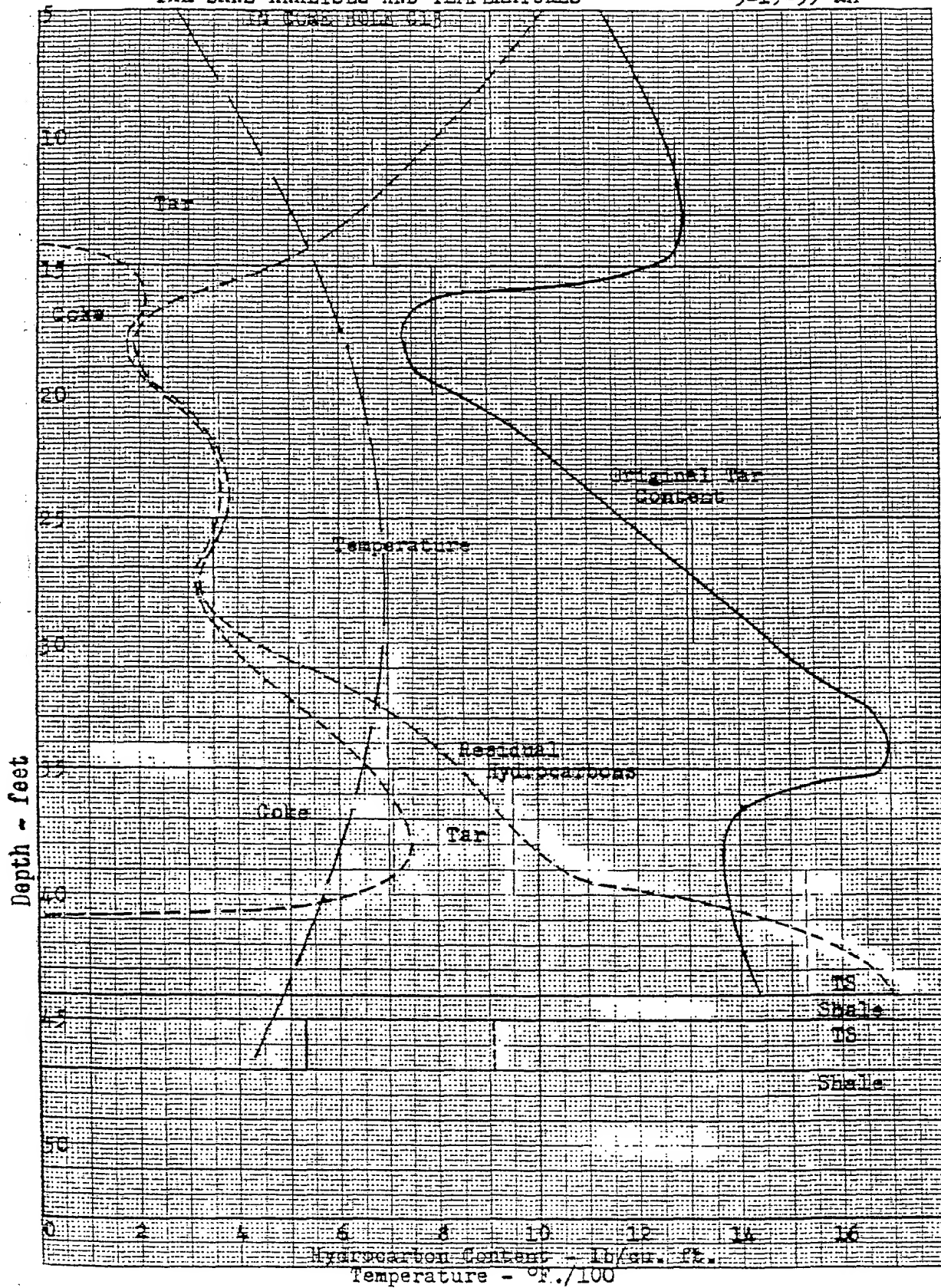


Figure 124

L9-215-14
5-19-59 RH

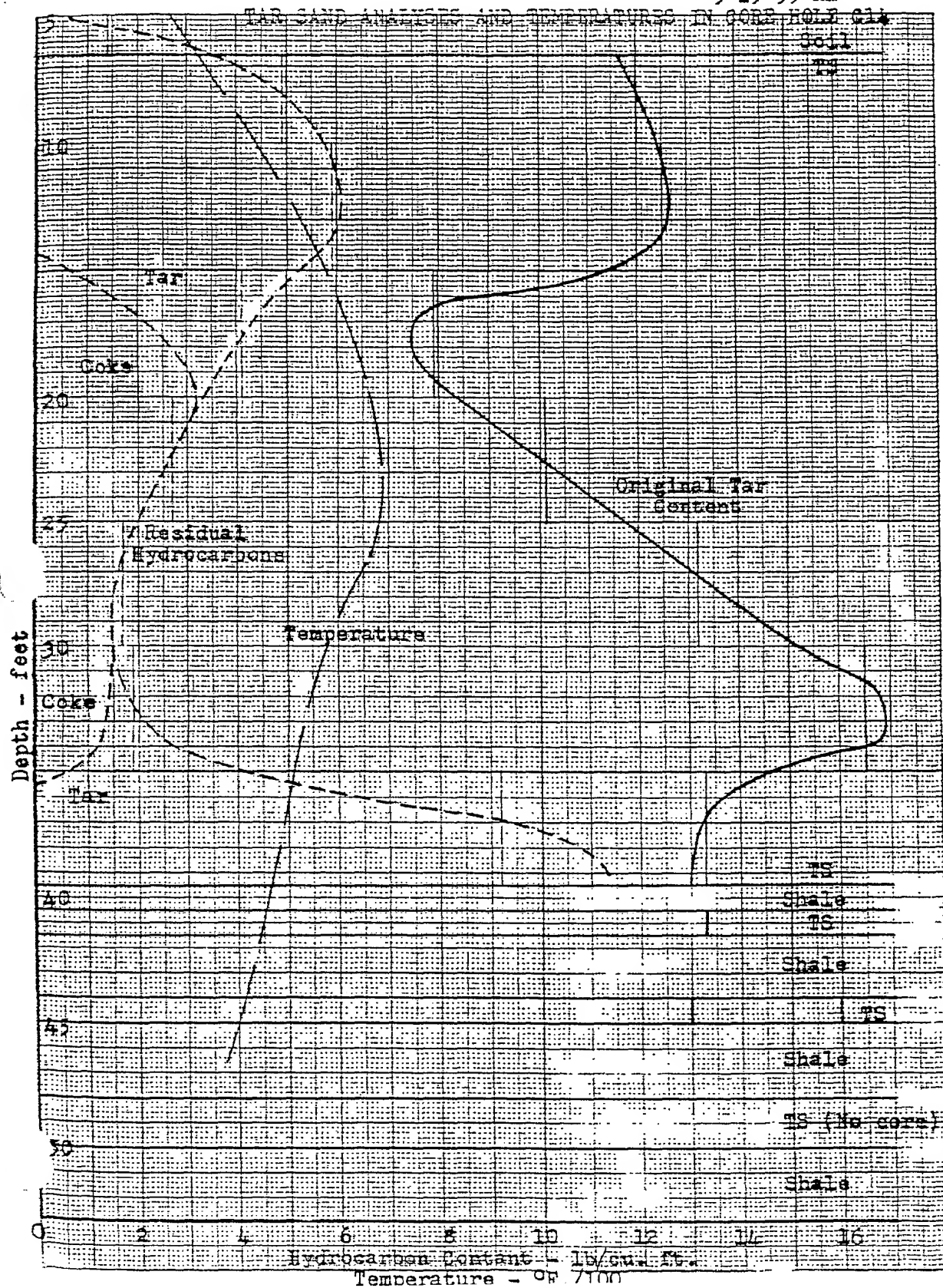


Figure 125

L9-215-15
5-27-59 RH

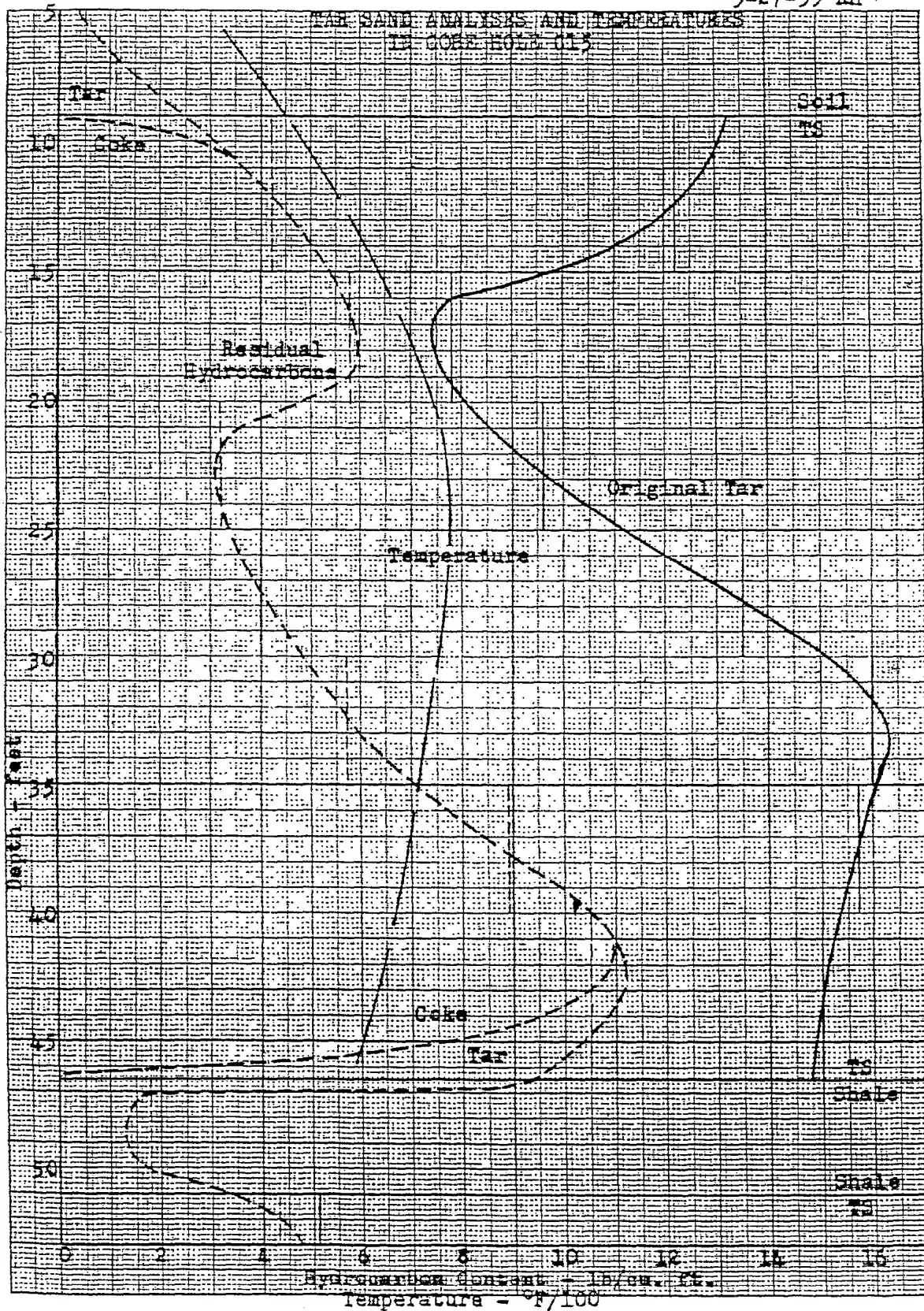


Figure 126

L9-215-16
5-14-59 RH

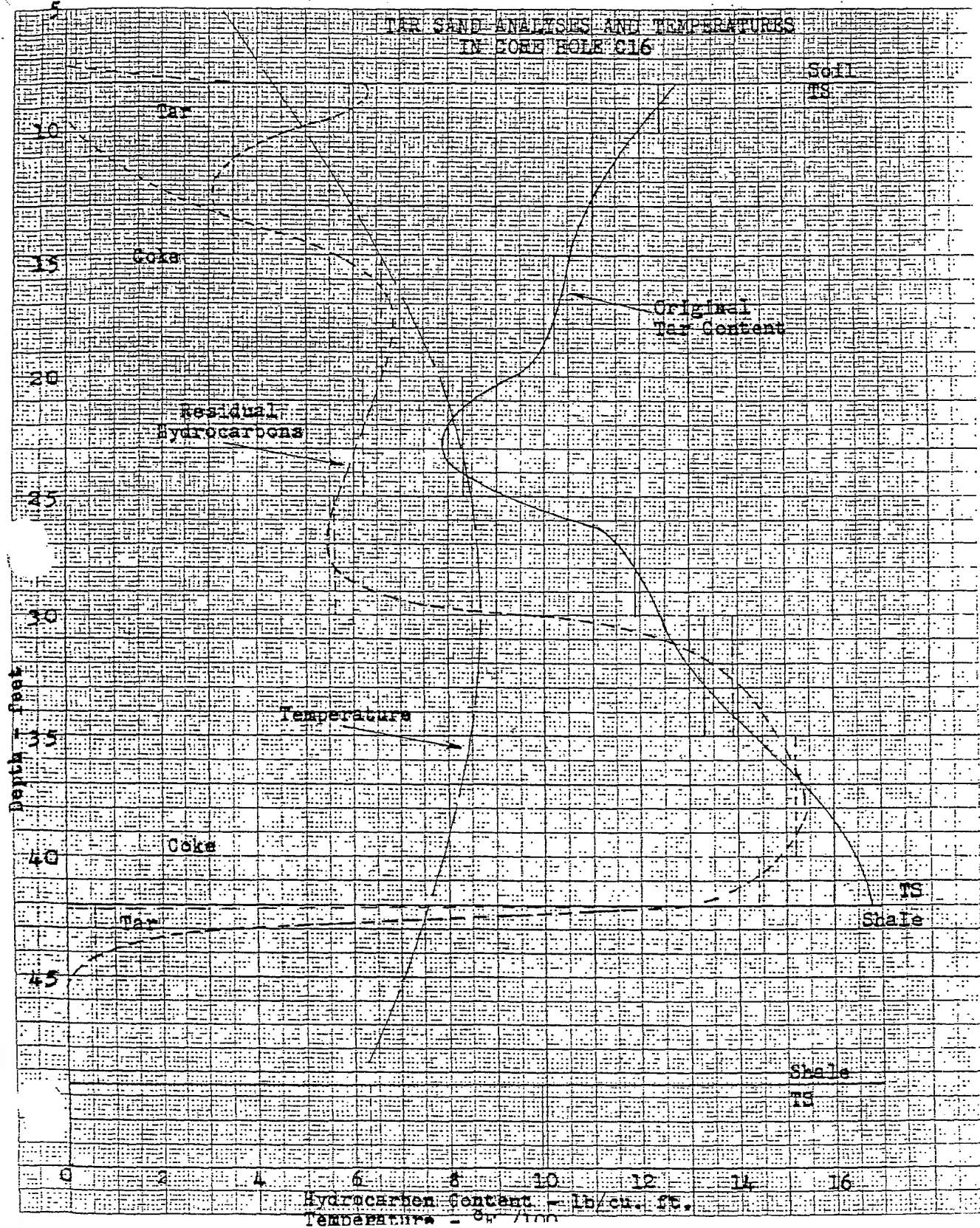


Figure 127

19-215-17
5-18-59 RH

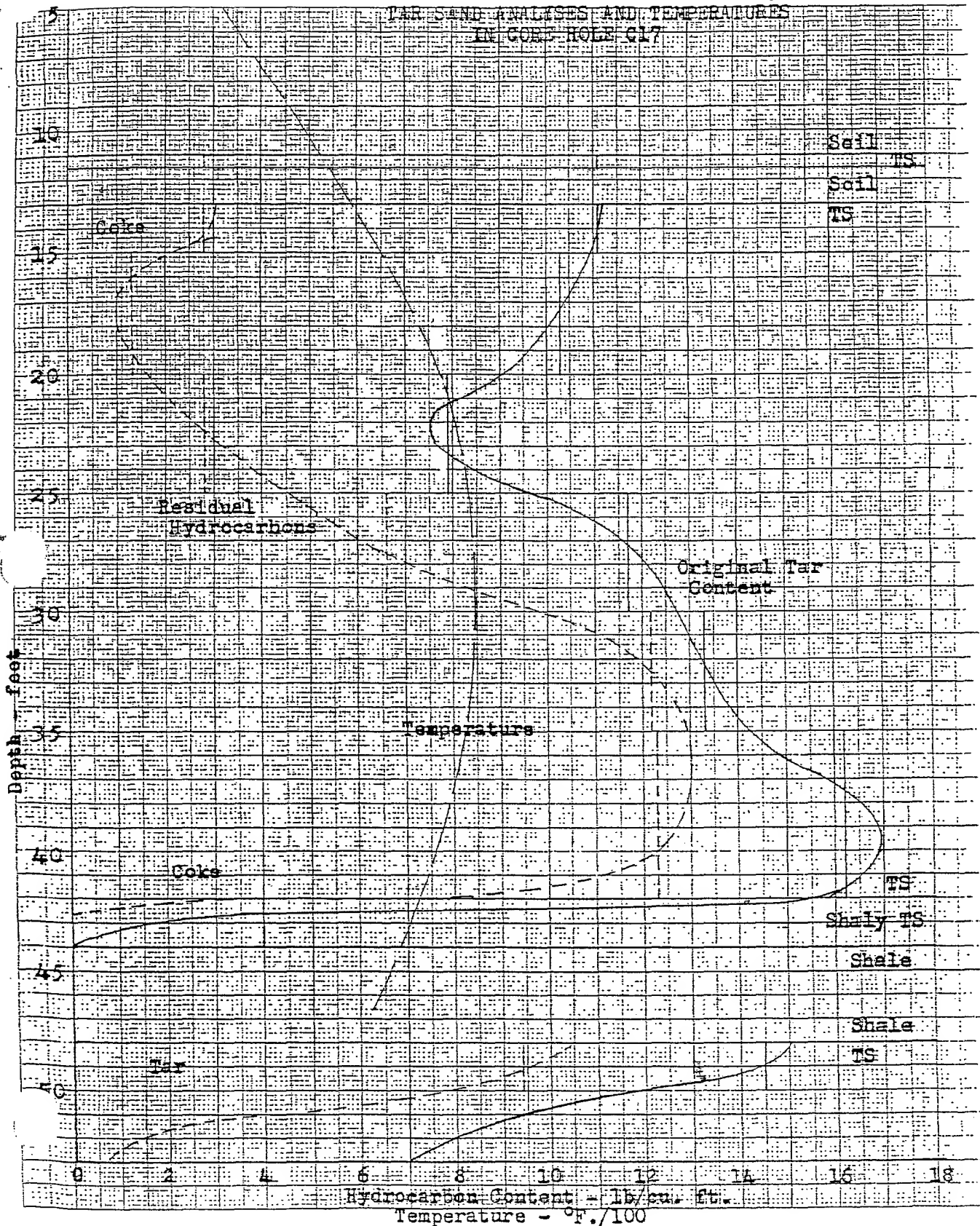


Figure 128

L9-215-18
5-18-59 RH

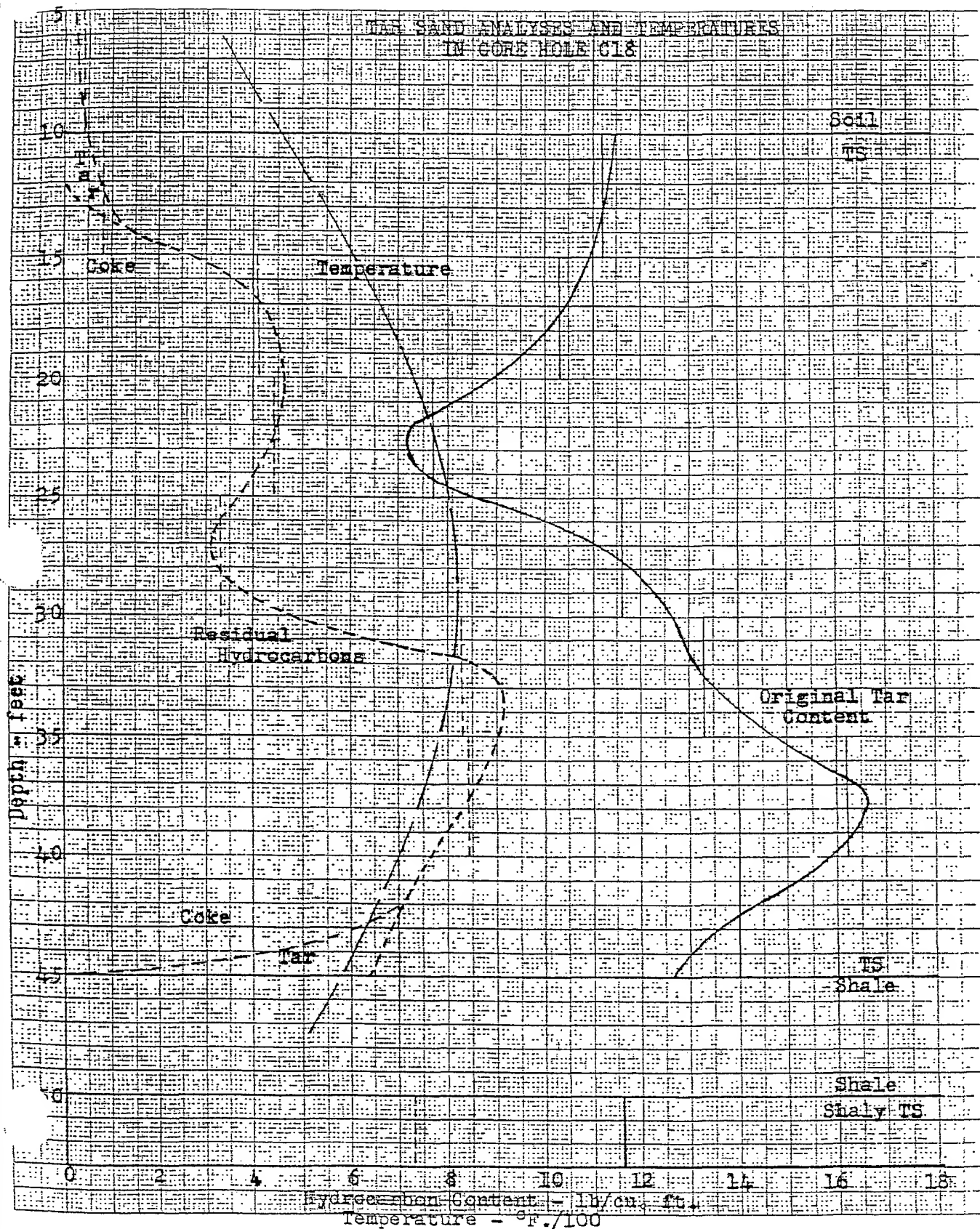
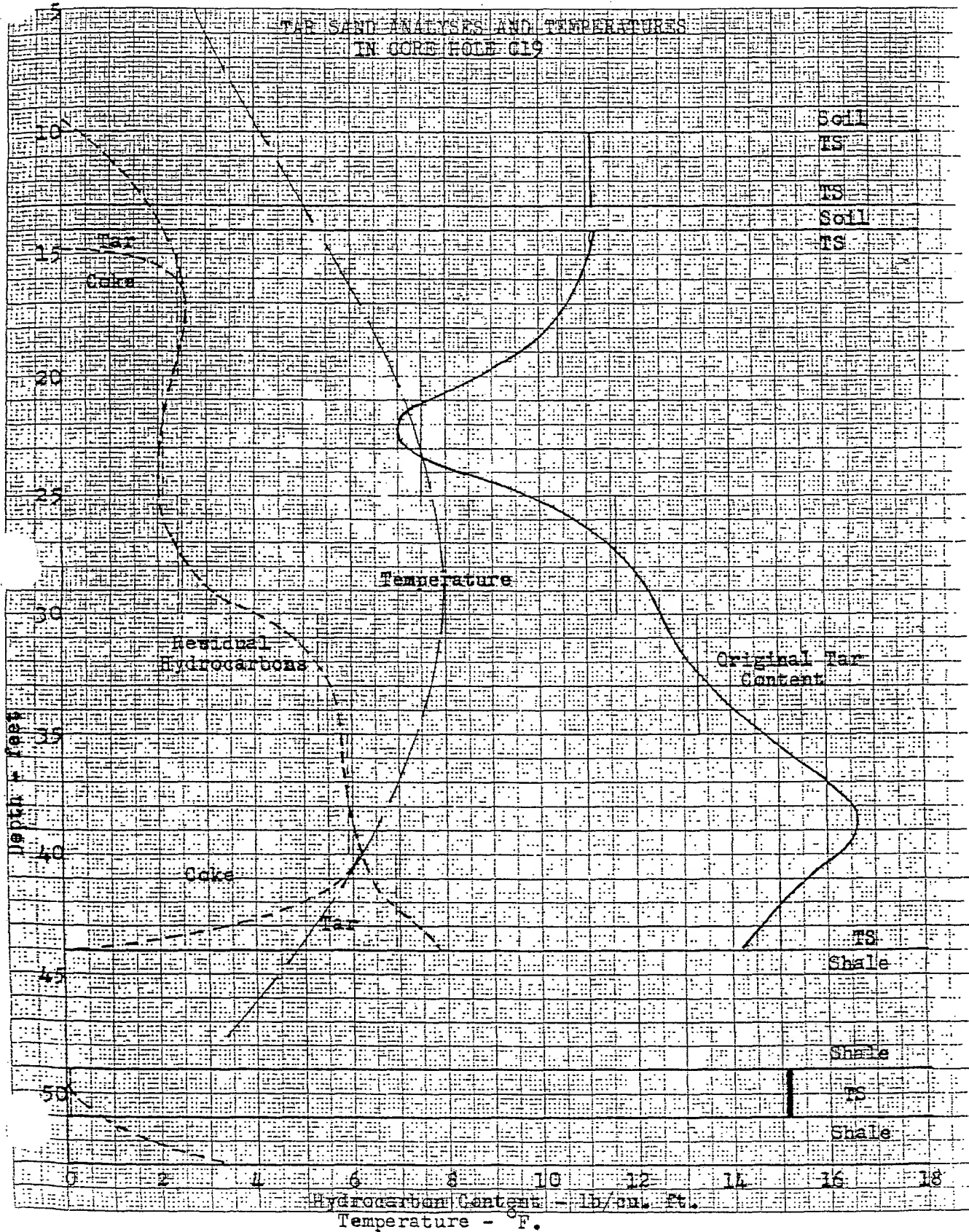


Figure 129

L9-215-19
5-18-59 RH



L9-215-20
5-18-59 RH

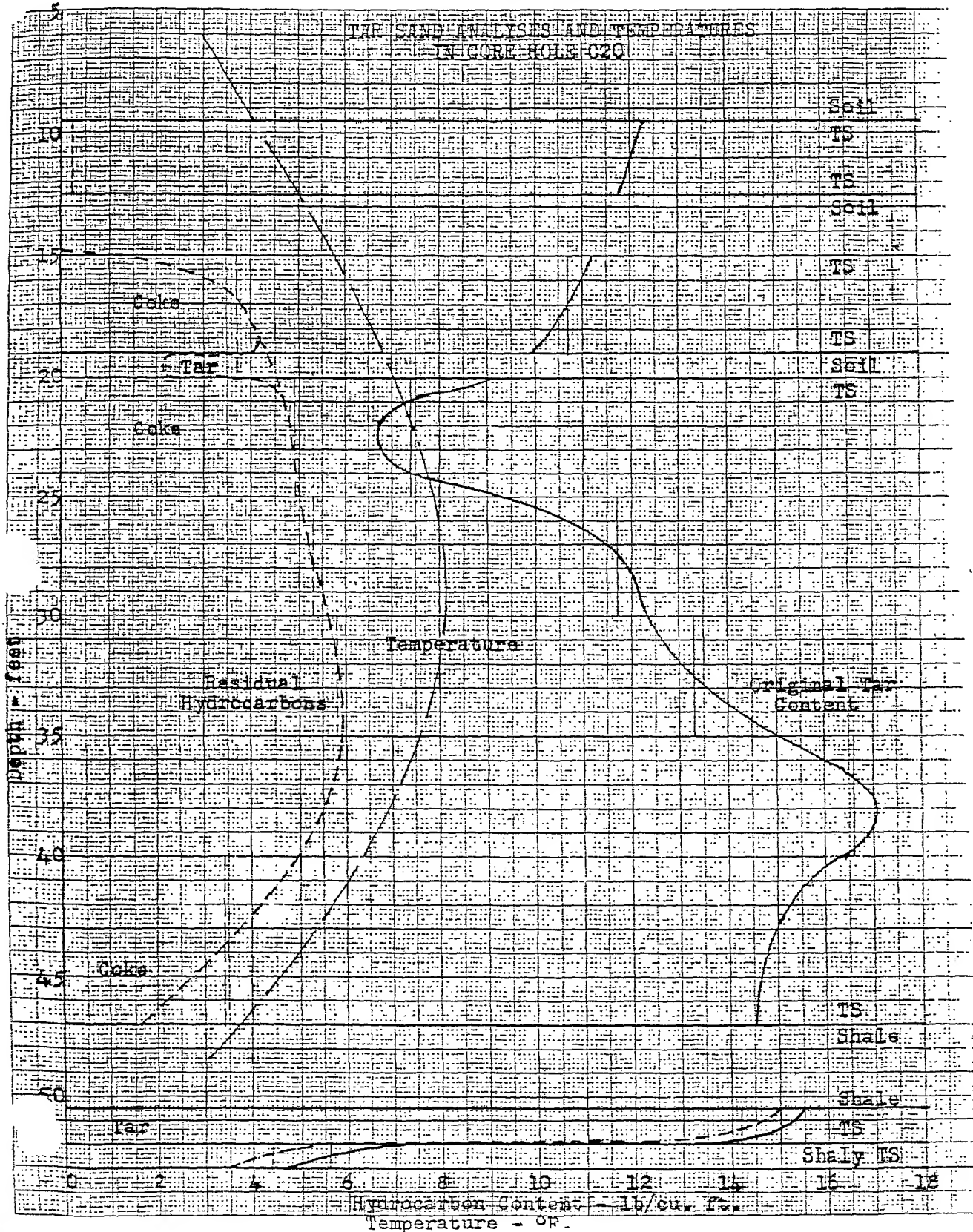


Figure 131

L9-215-21
5-18-59

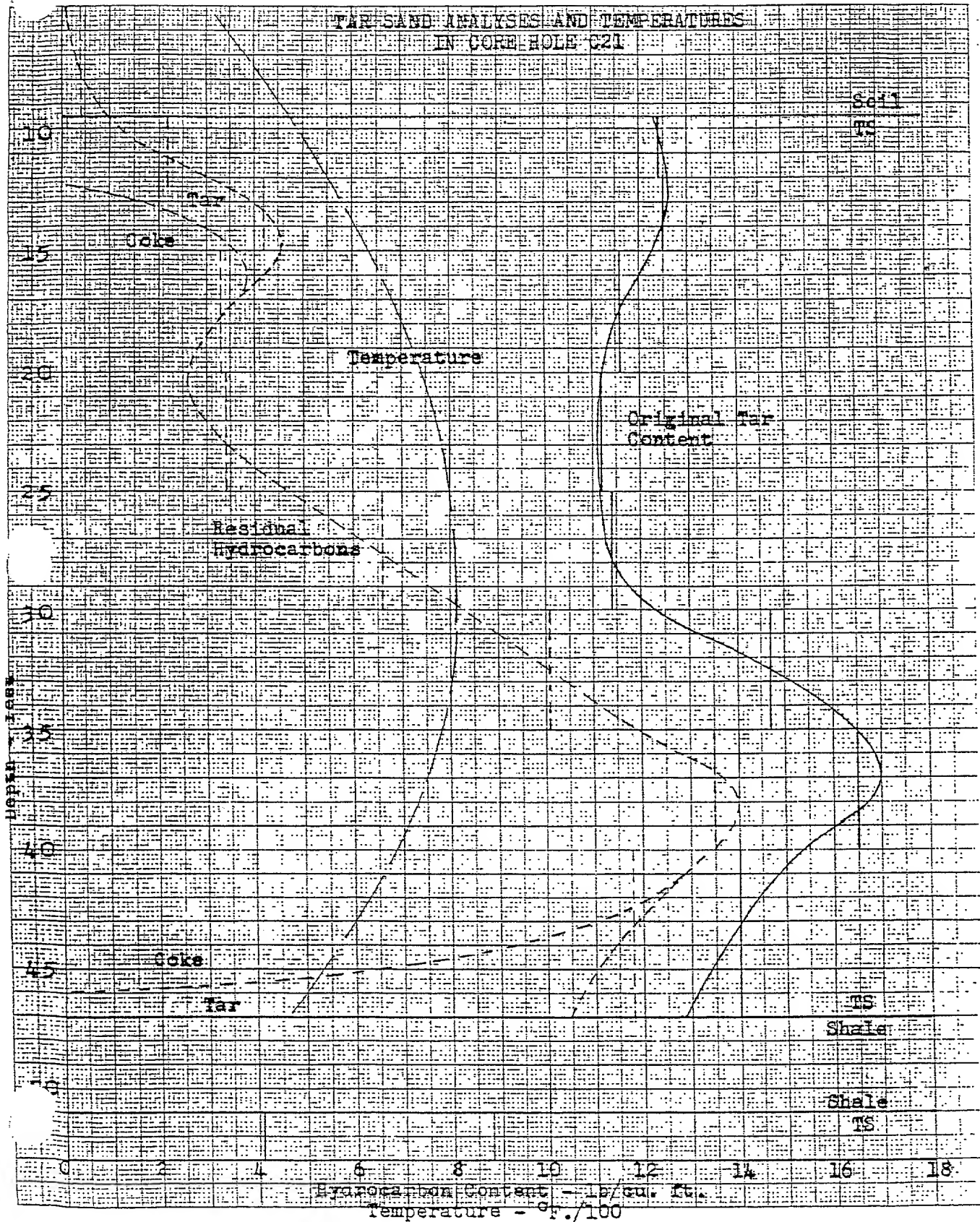


Figure 132

19-215-22
5-18-59 RH

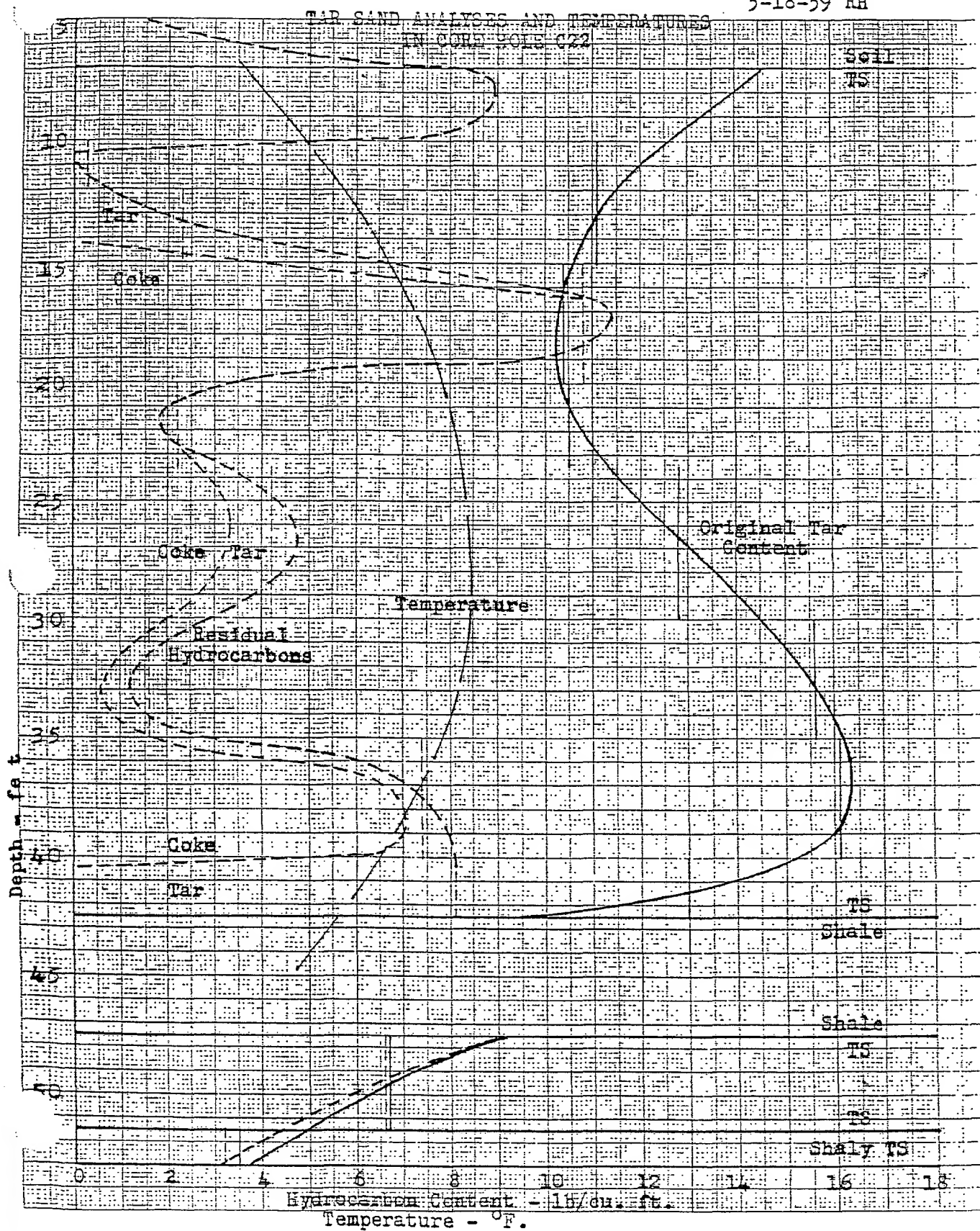


Figure 133

L9-215-23
5-18-59 RH

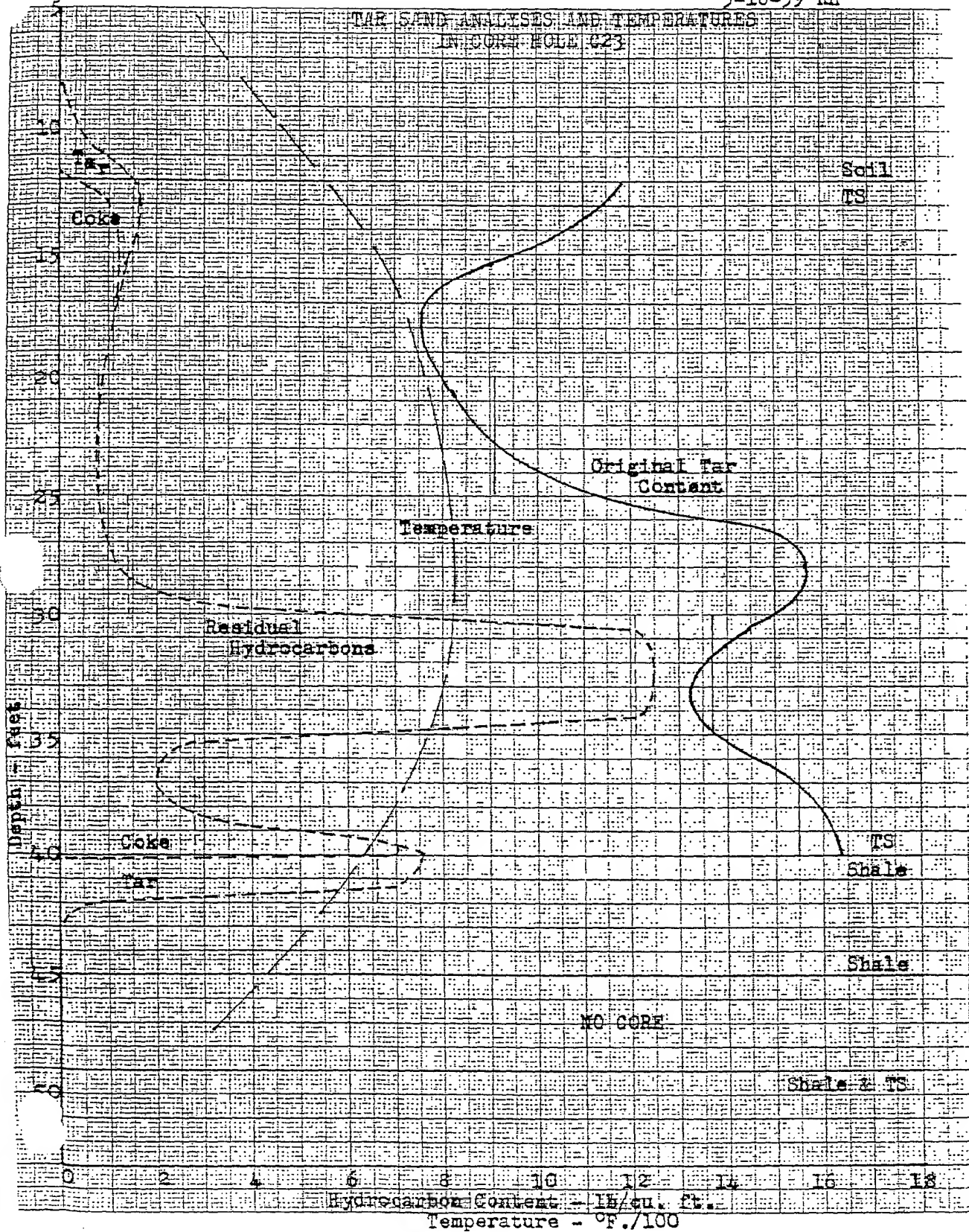


Figure 134

L9-215-24
5-27-59 RH

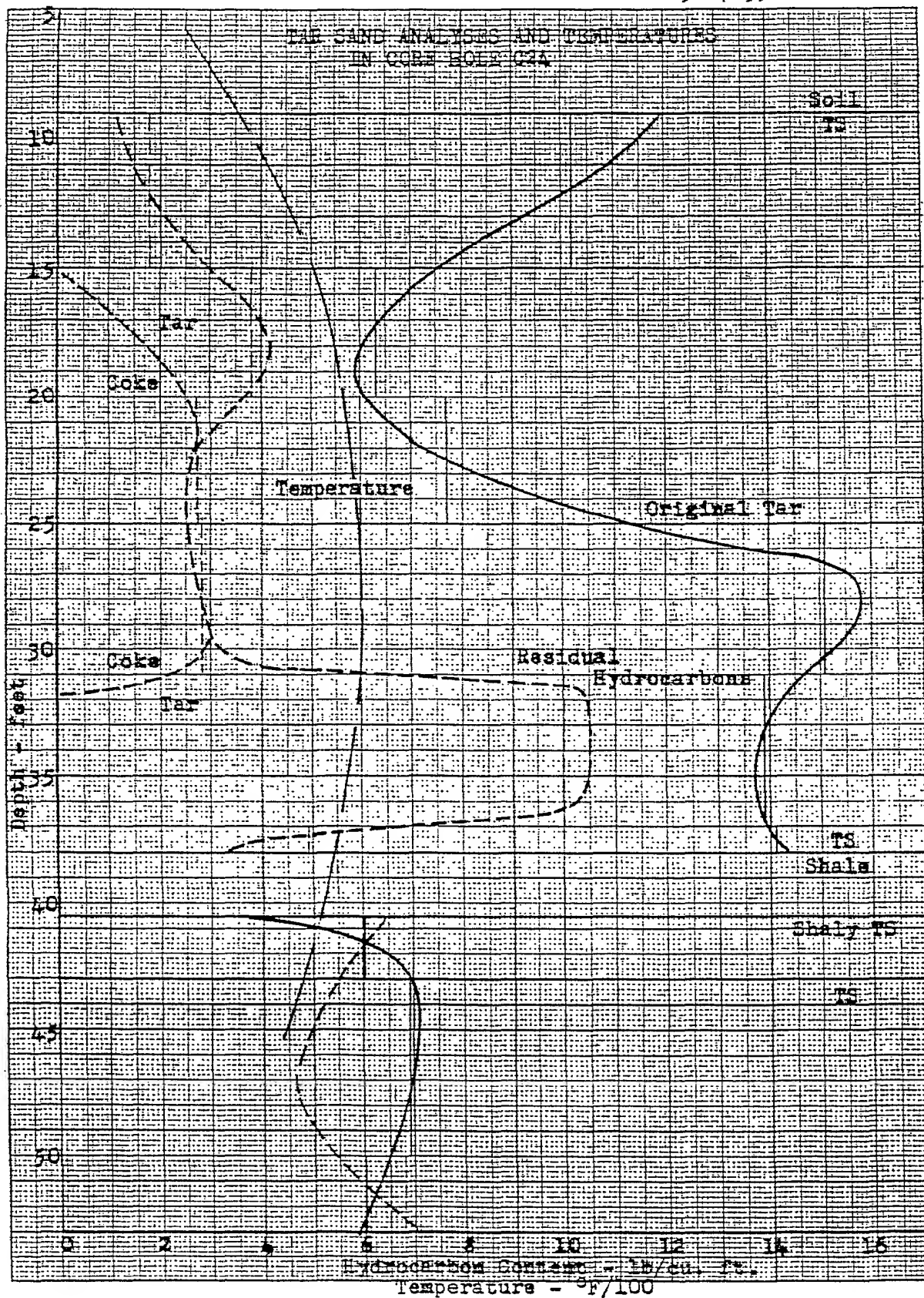
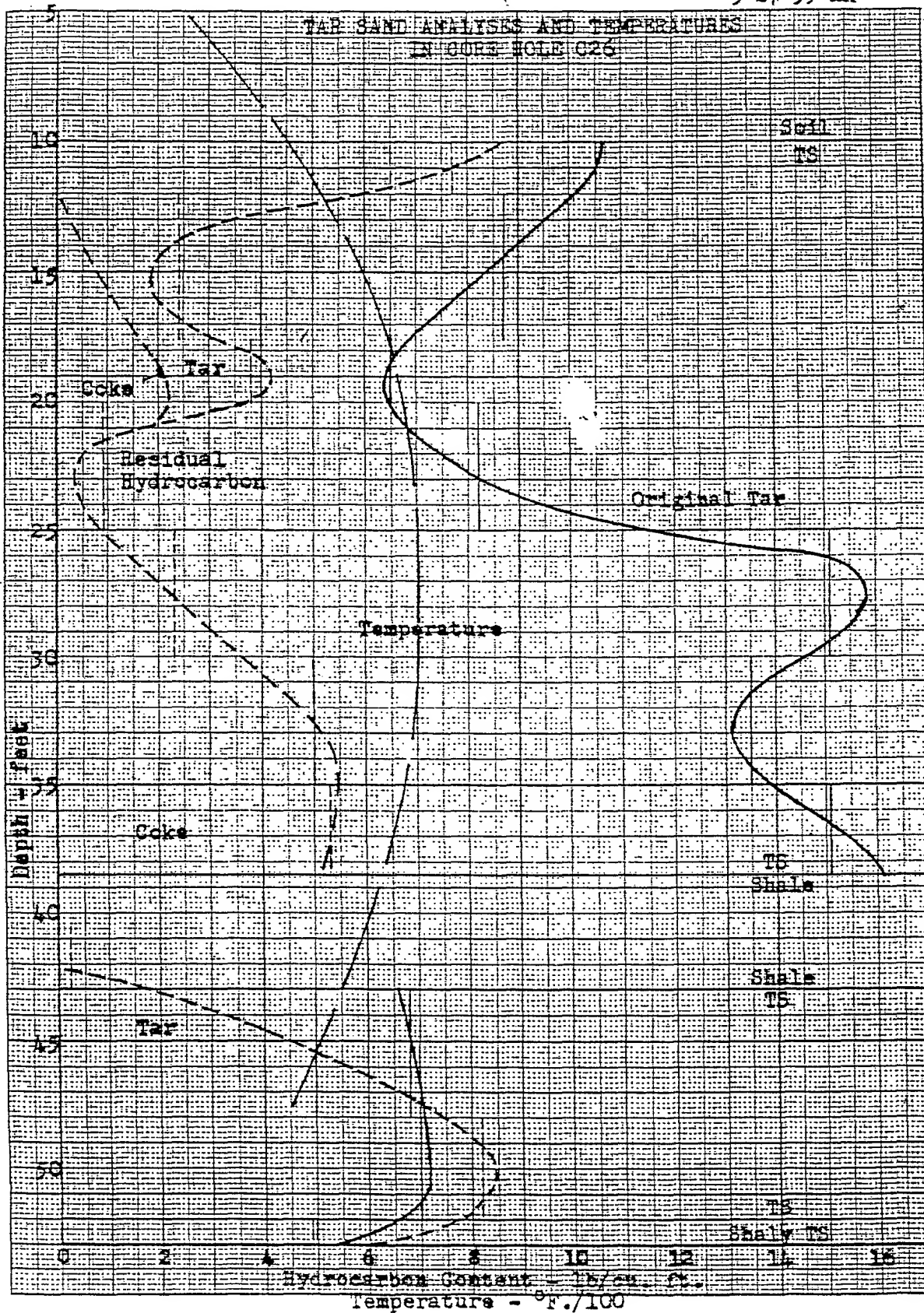


Figure 135

19-215-26
5-27-59 RH



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Figure 136

L9-215-27
5-18-59 RH

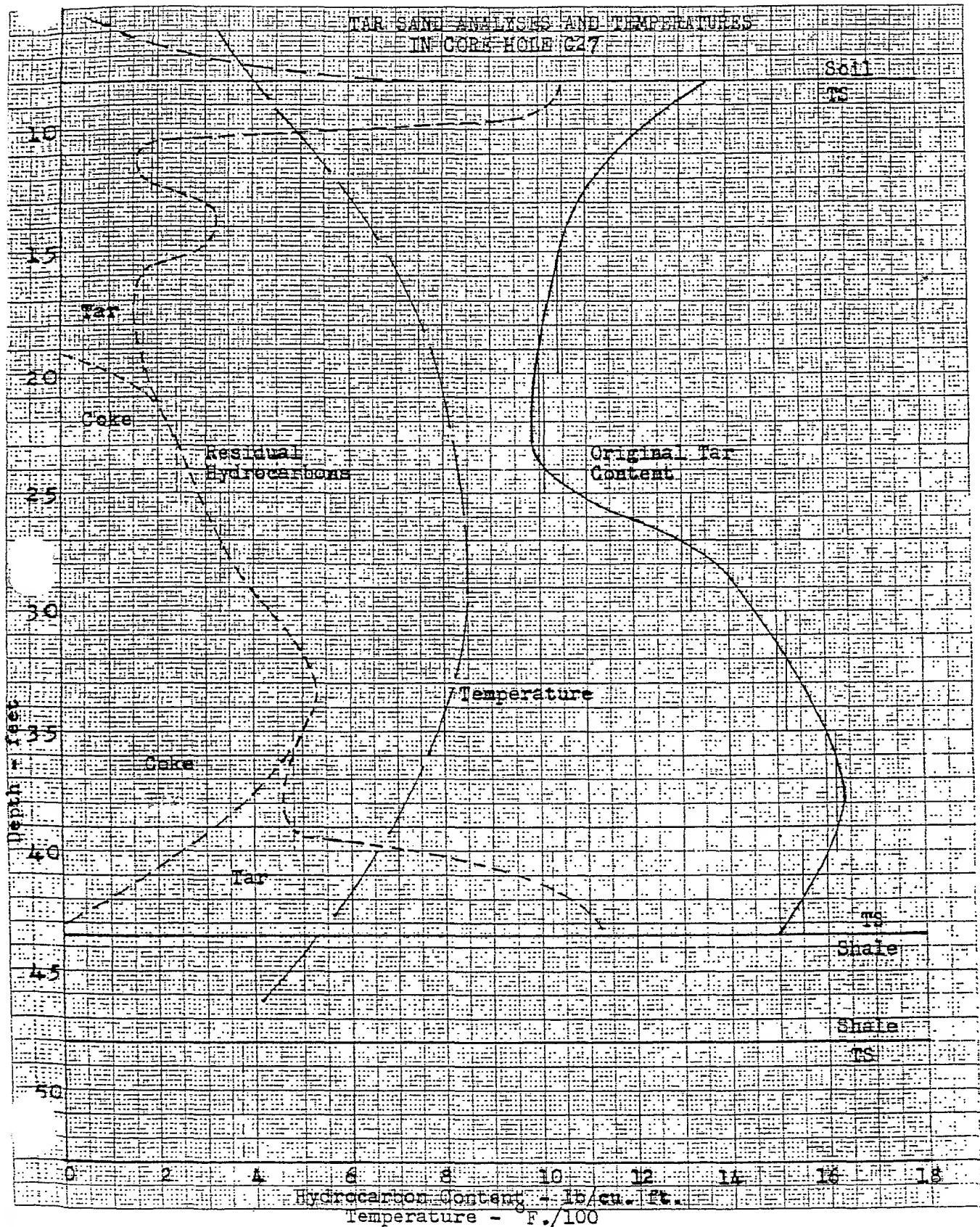


Figure 137

L9-215-28
5-18-59 RH

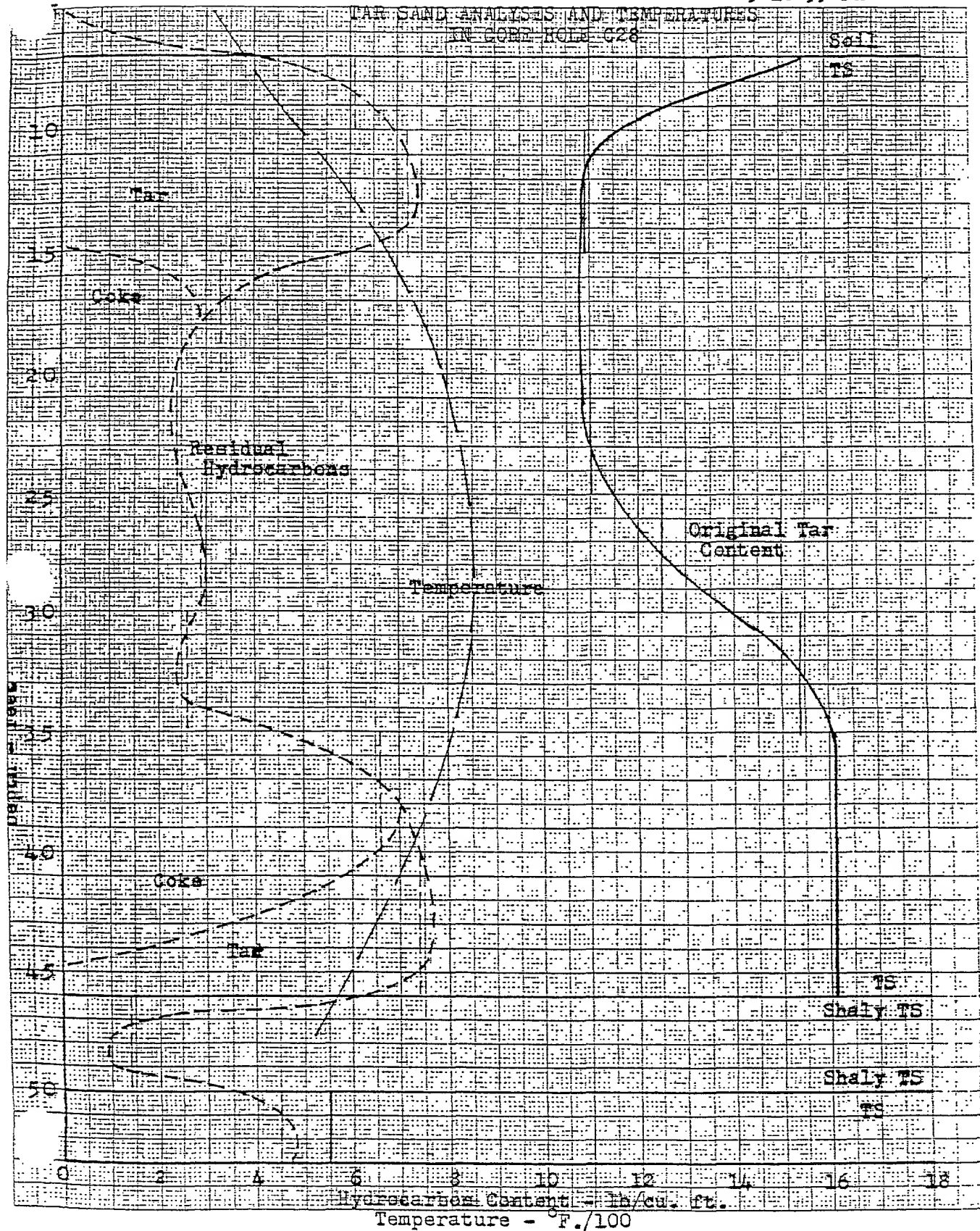


Figure 138

TAR SAND ANALYSES
AND TEMPERATURES
IN CORE HOLE C29

L9-215-29
5-18-59 RH.

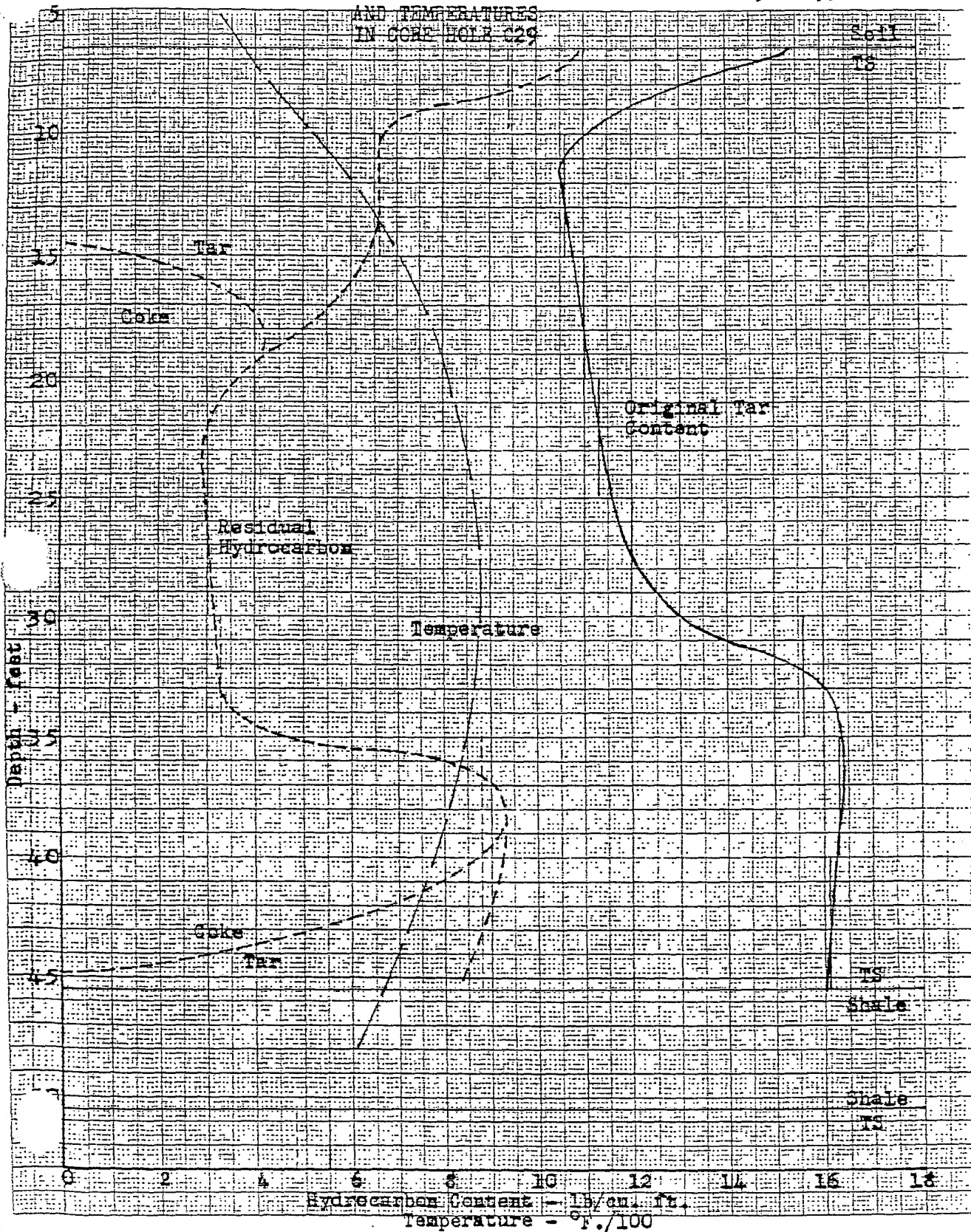


Figure 139

TAR SAND ANALYSES IN CORE HOLE C30

L9-215-30
5-18-59 RH

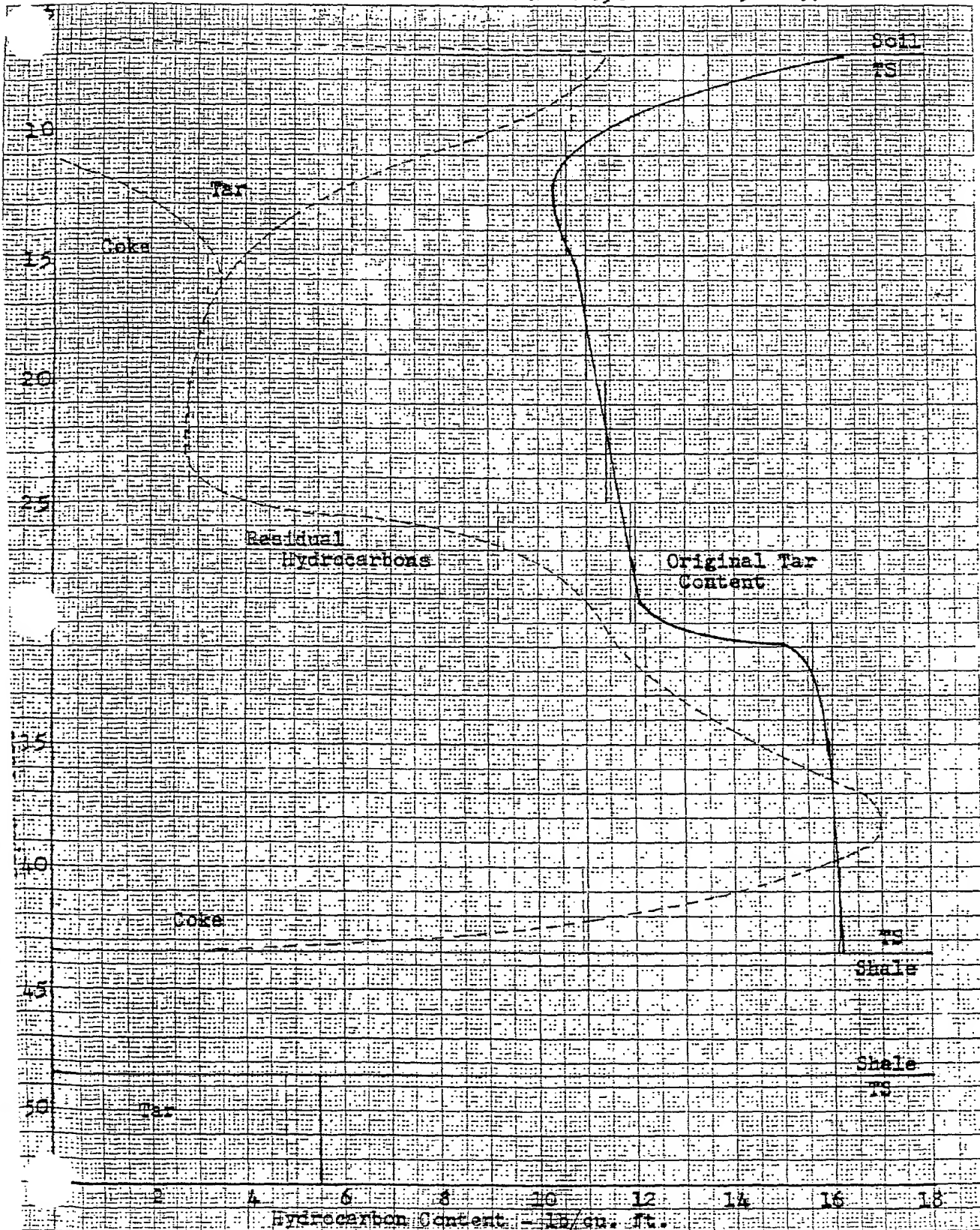


Figure 140

L9-215-31
5-18-59 RH

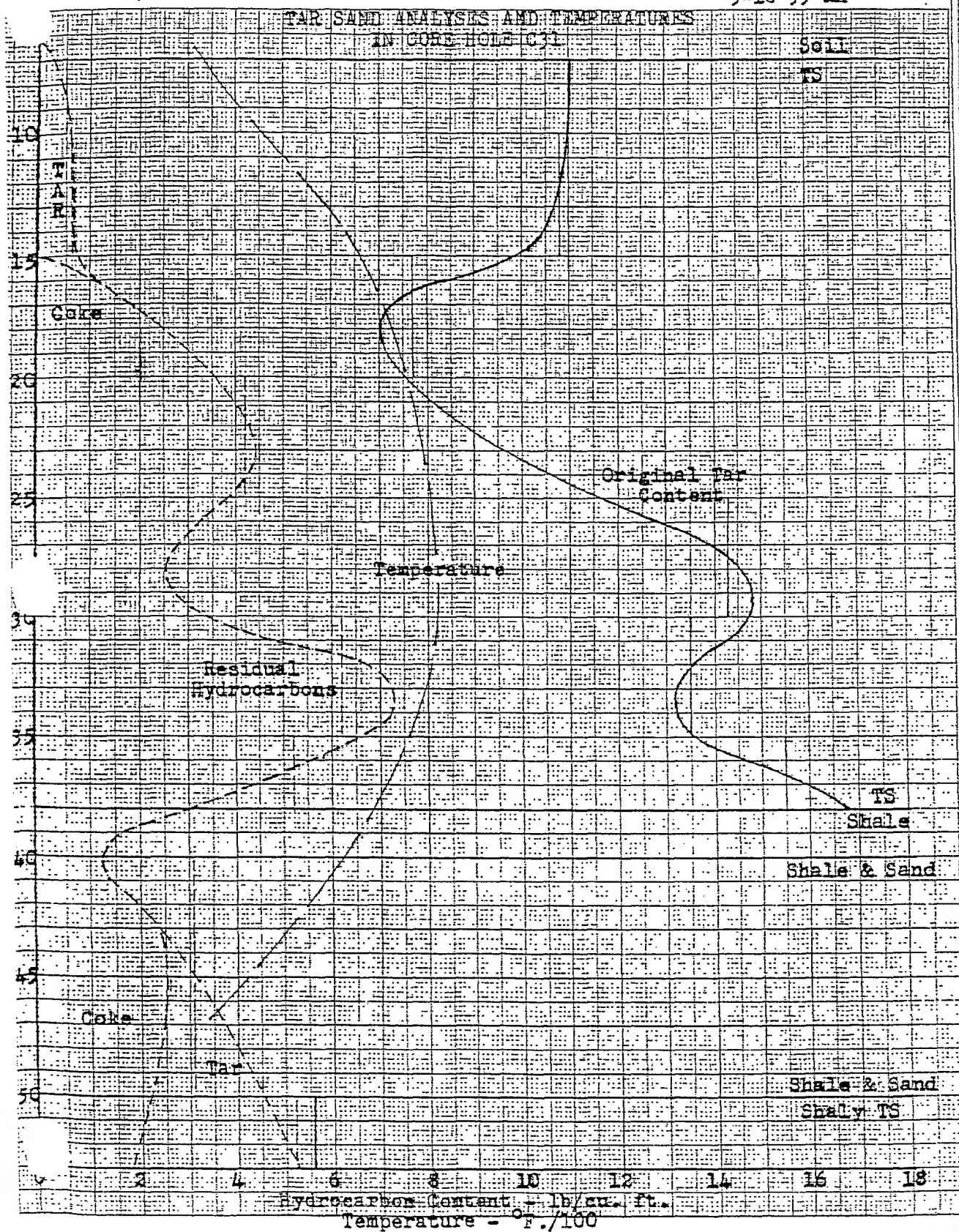
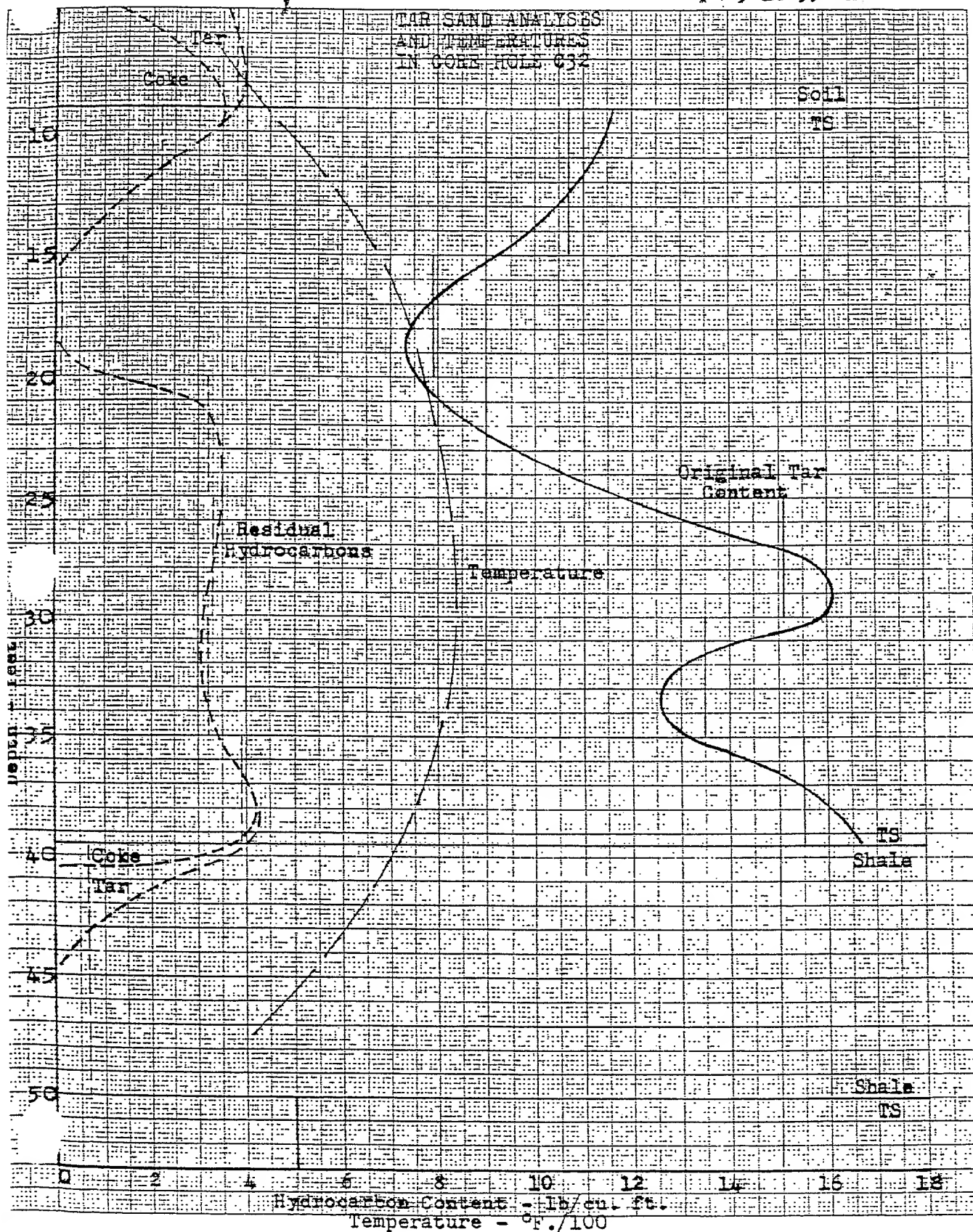


Figure 141

L9-215-32
5-18-59 RH



L9-215-33
5-18-59 RH

Figure 140

TAR SAND ANALYSES
AND TEMPERATURES
IN CORE HOLE C33

Original Tar
Content

Residual
Hydrocarbons

Temperature

TS
Shaly TS
Shale

Shale
Shaly TS

Hydrocarbon Content - lb./cu. ft.

Temperature - °F./100

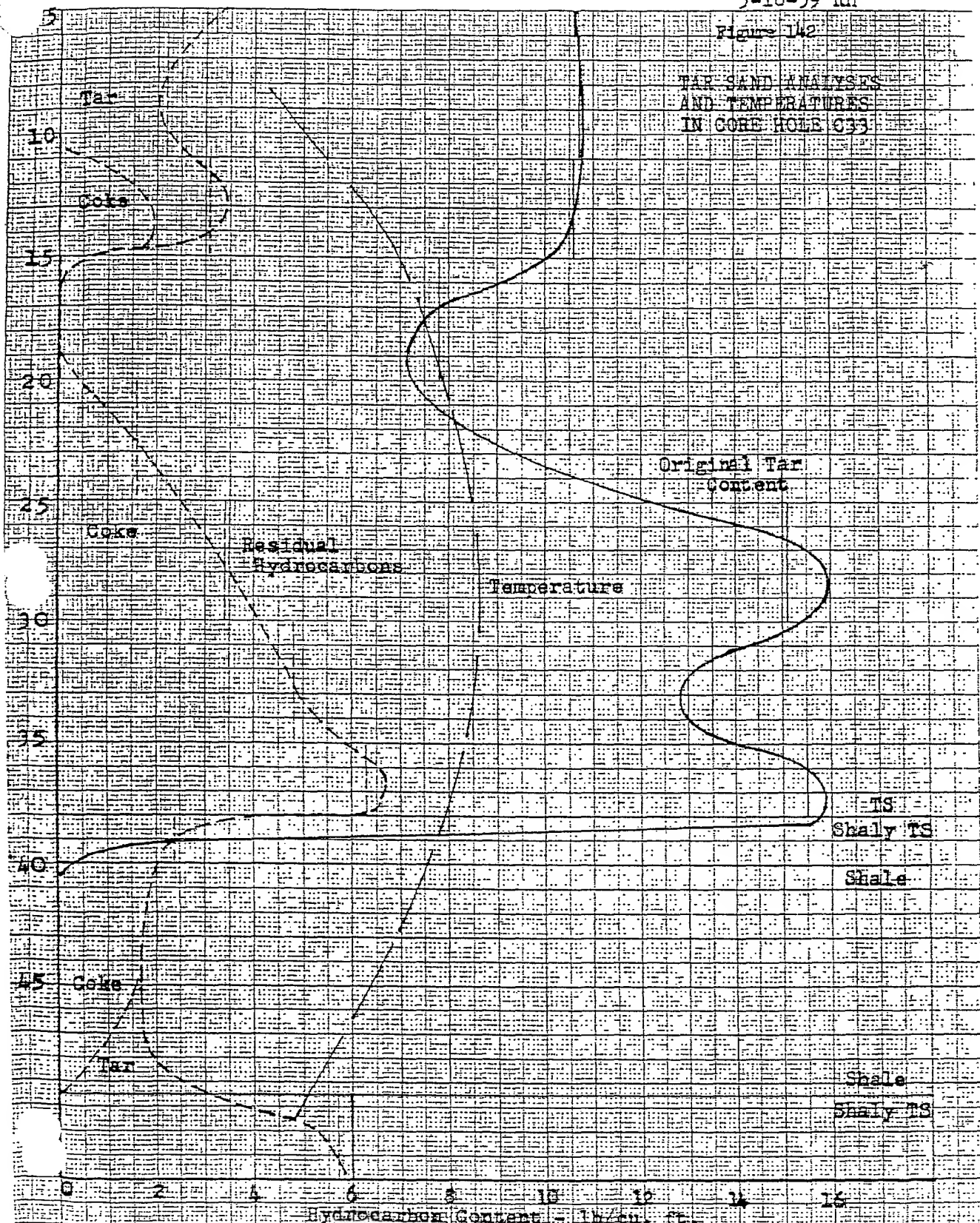


Figure 143

L9-215-34
5-19-59 RH

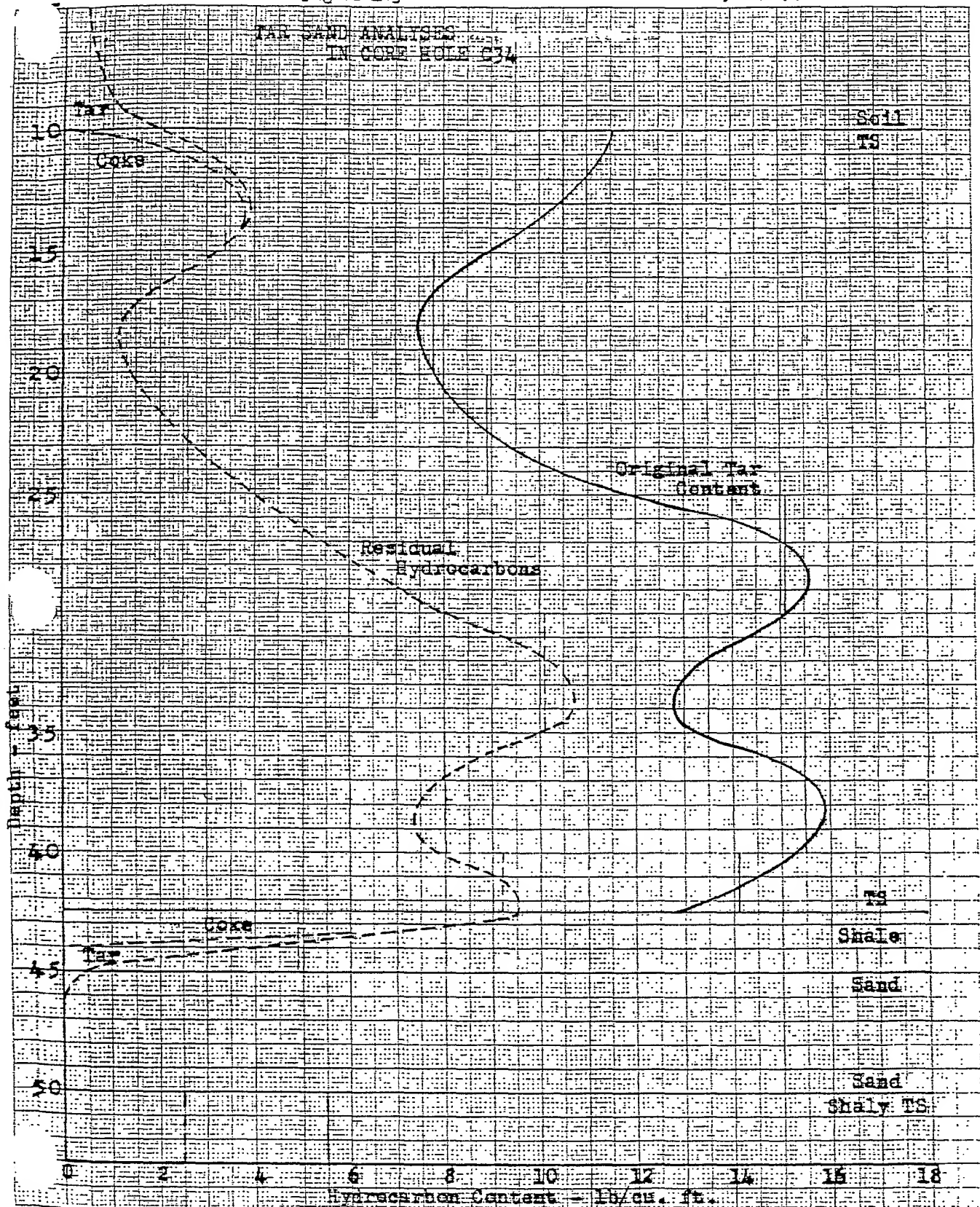


Figure 144

19-215-35
5-27-59 RH

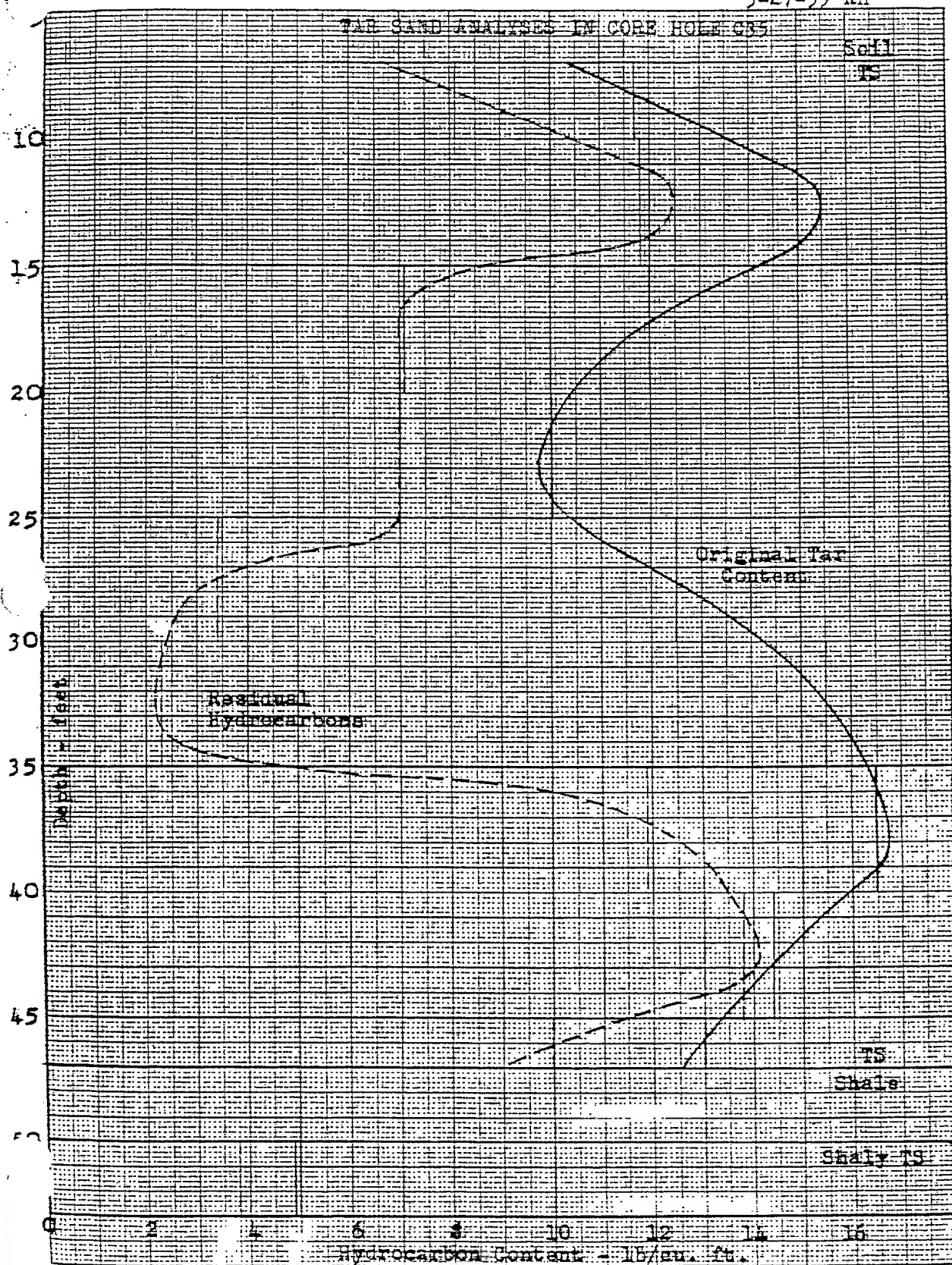


Figure 145

L9-216-1
5-18-59 RH

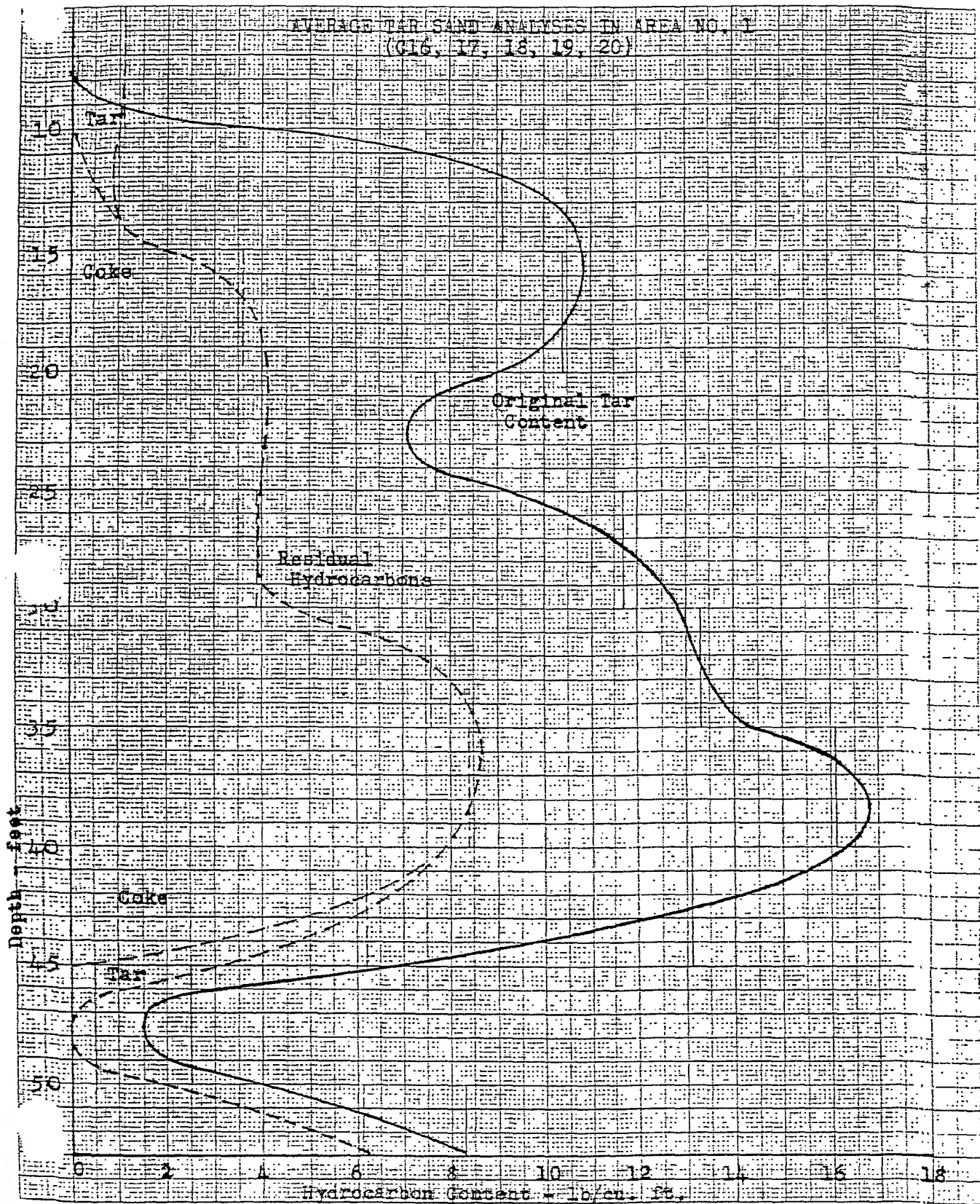


Figure 146

L9-216-2
5-18-59 RH

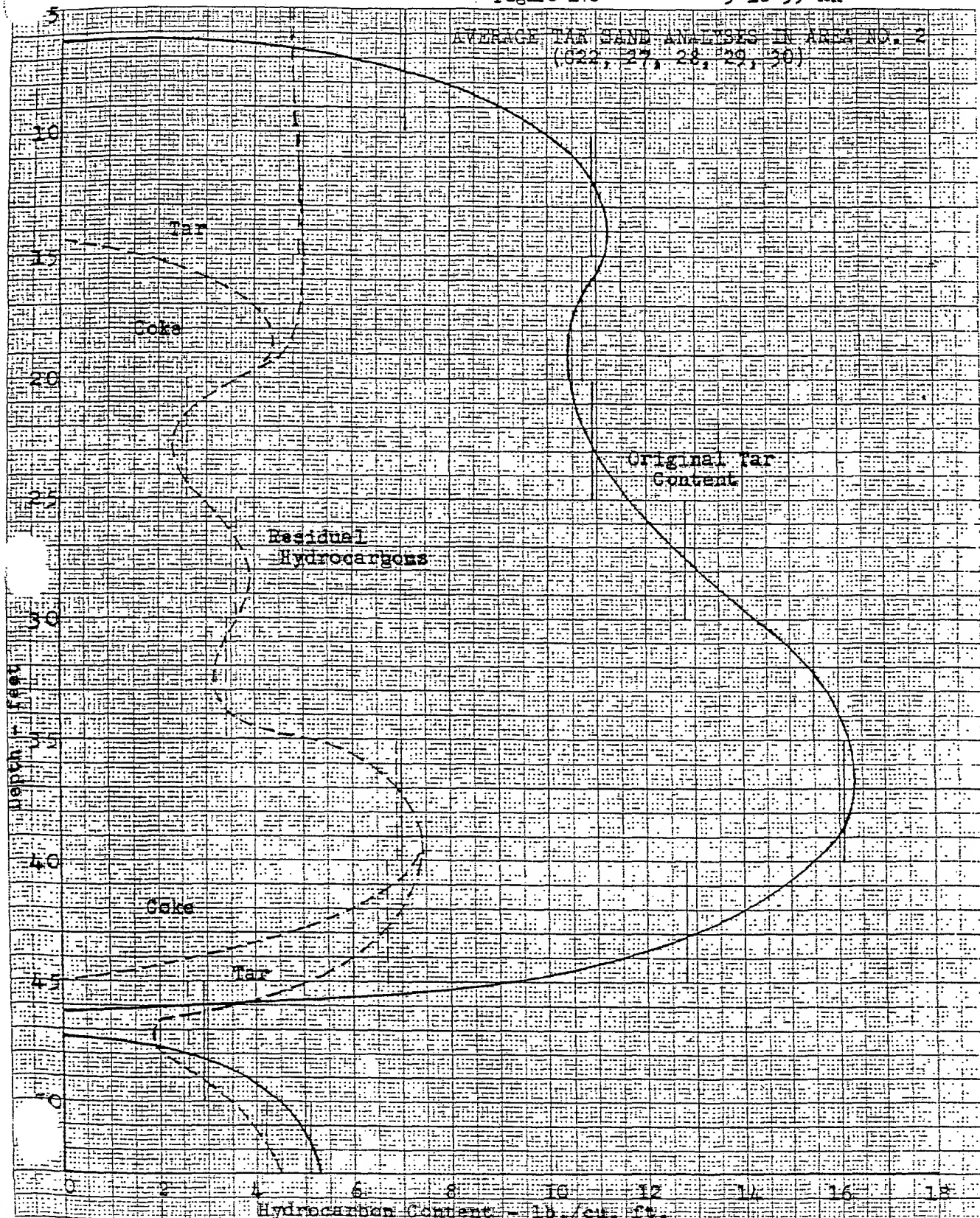


Figure 147

L9-216-3
5-18-59 RH

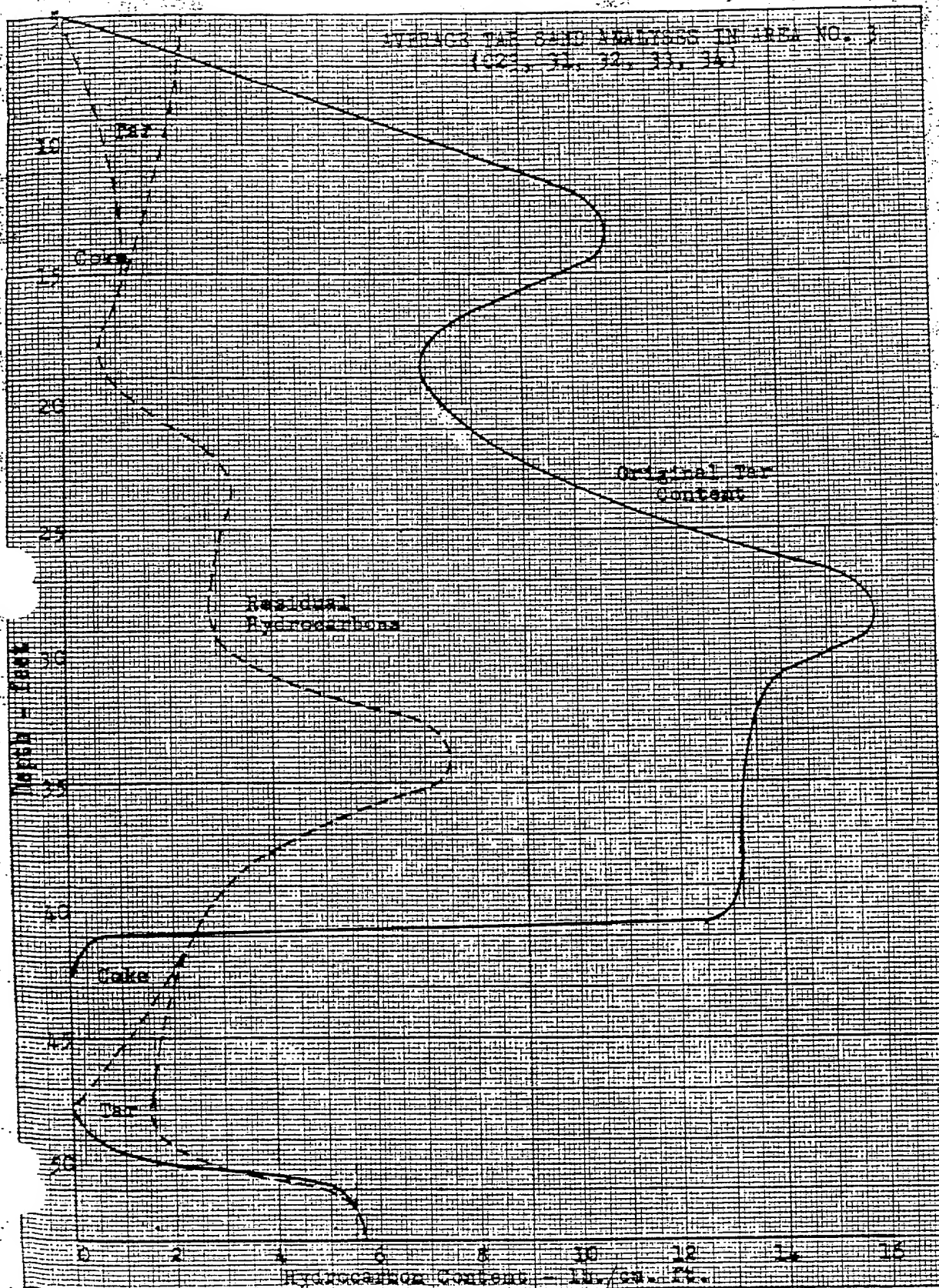


Figure 148

L9-703
5-14-59 RH

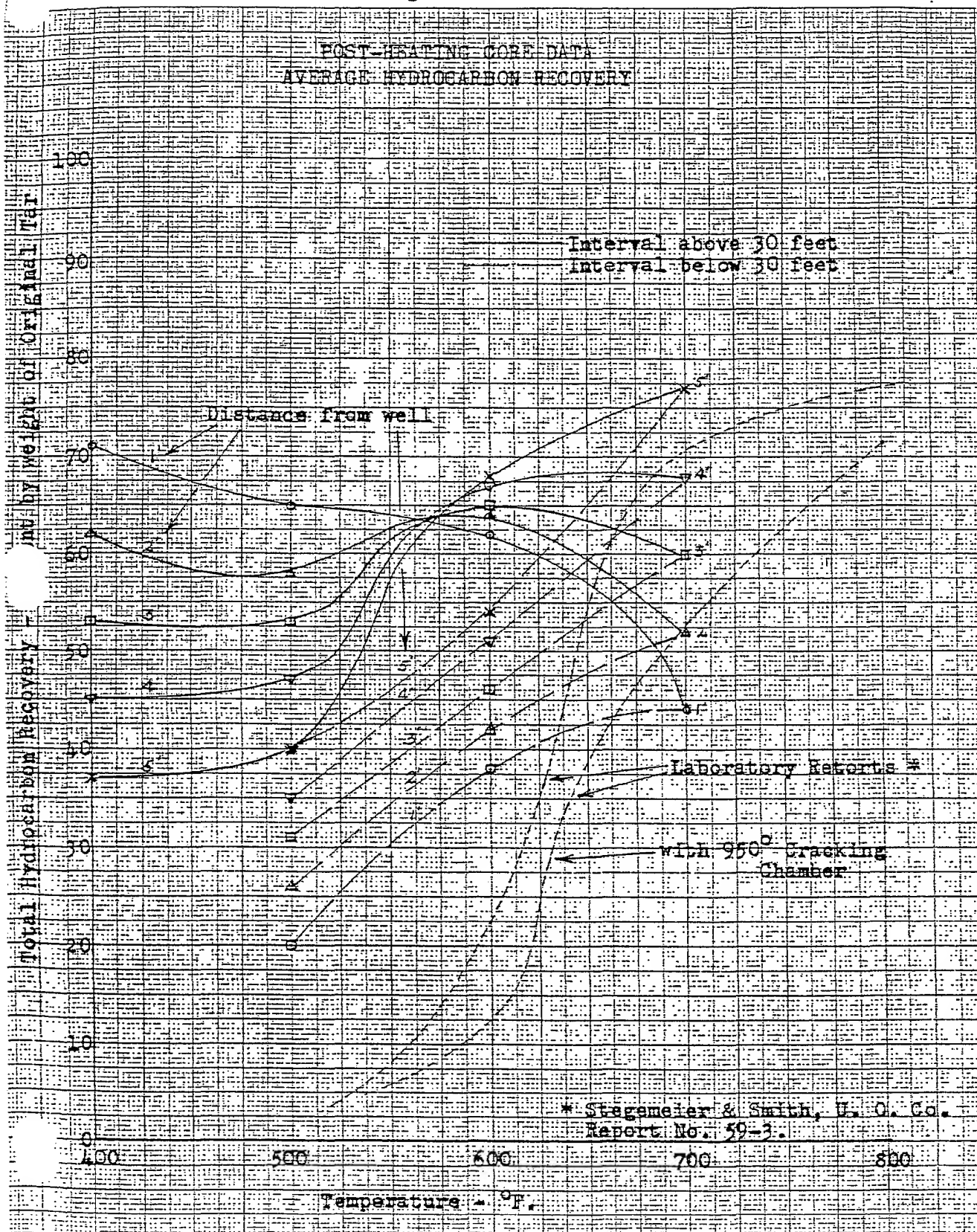


Figure 149

L9-704
5-14-59 RM

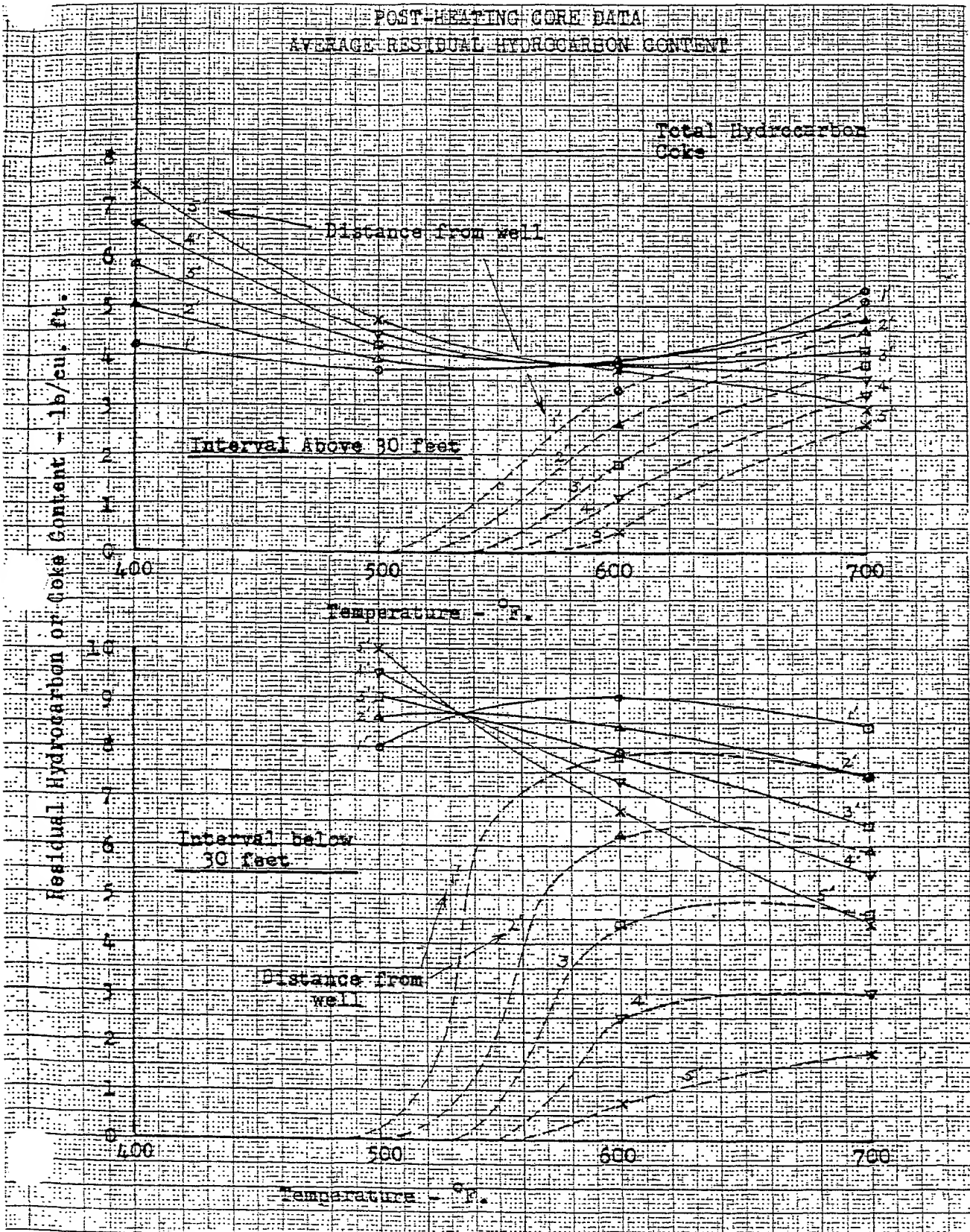


Figure 150

L9-707
5-15-59 RH

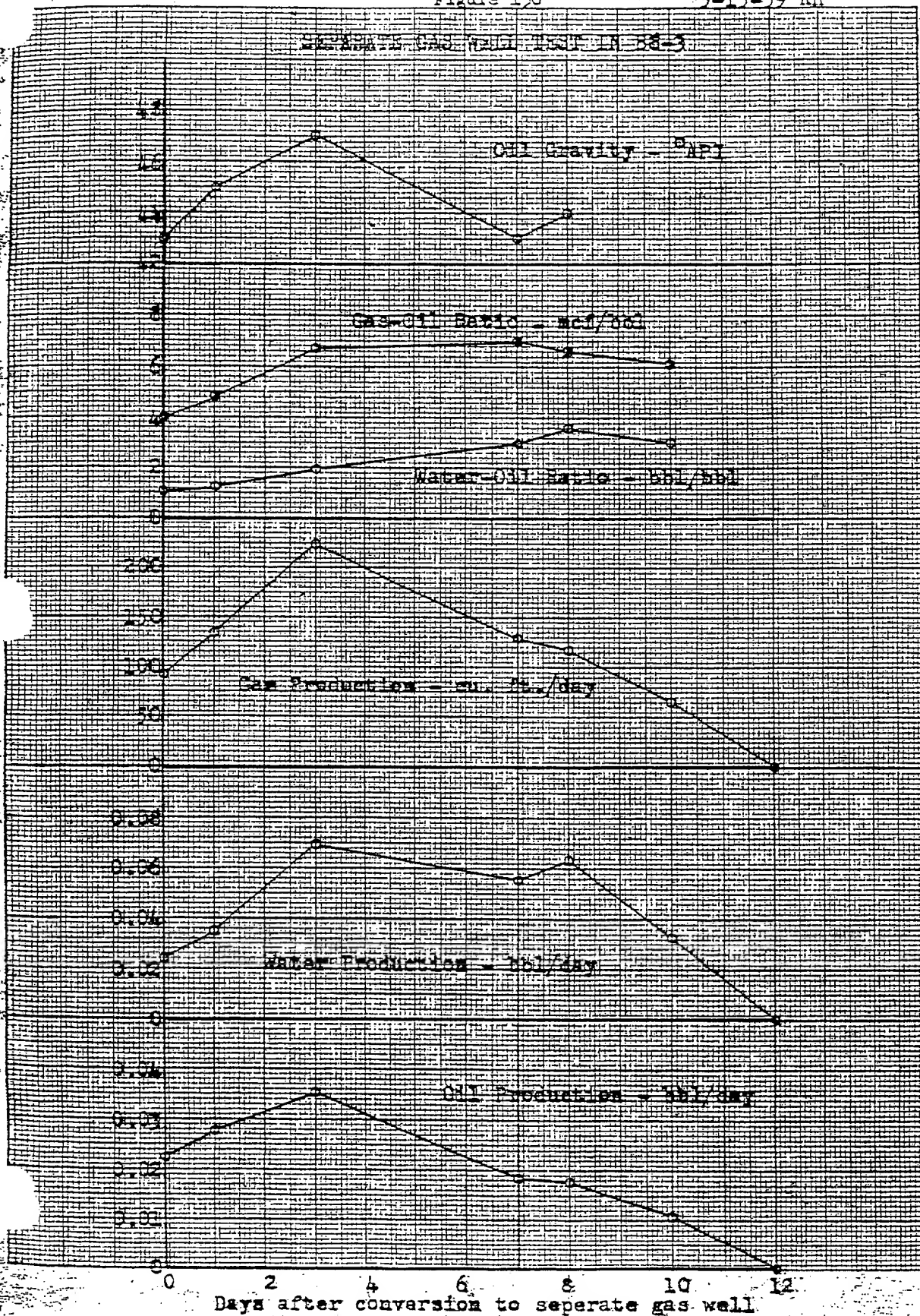


Figure 151

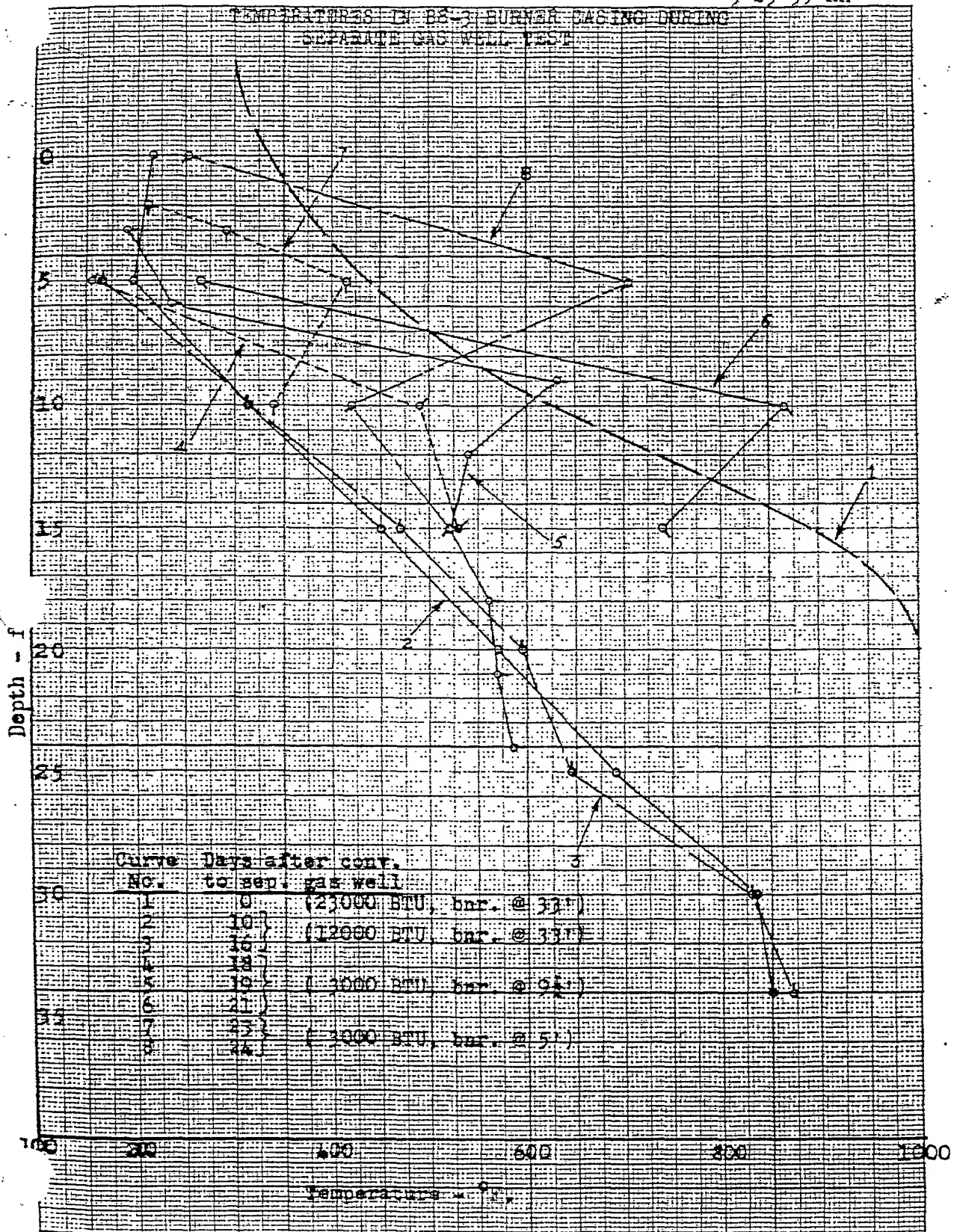
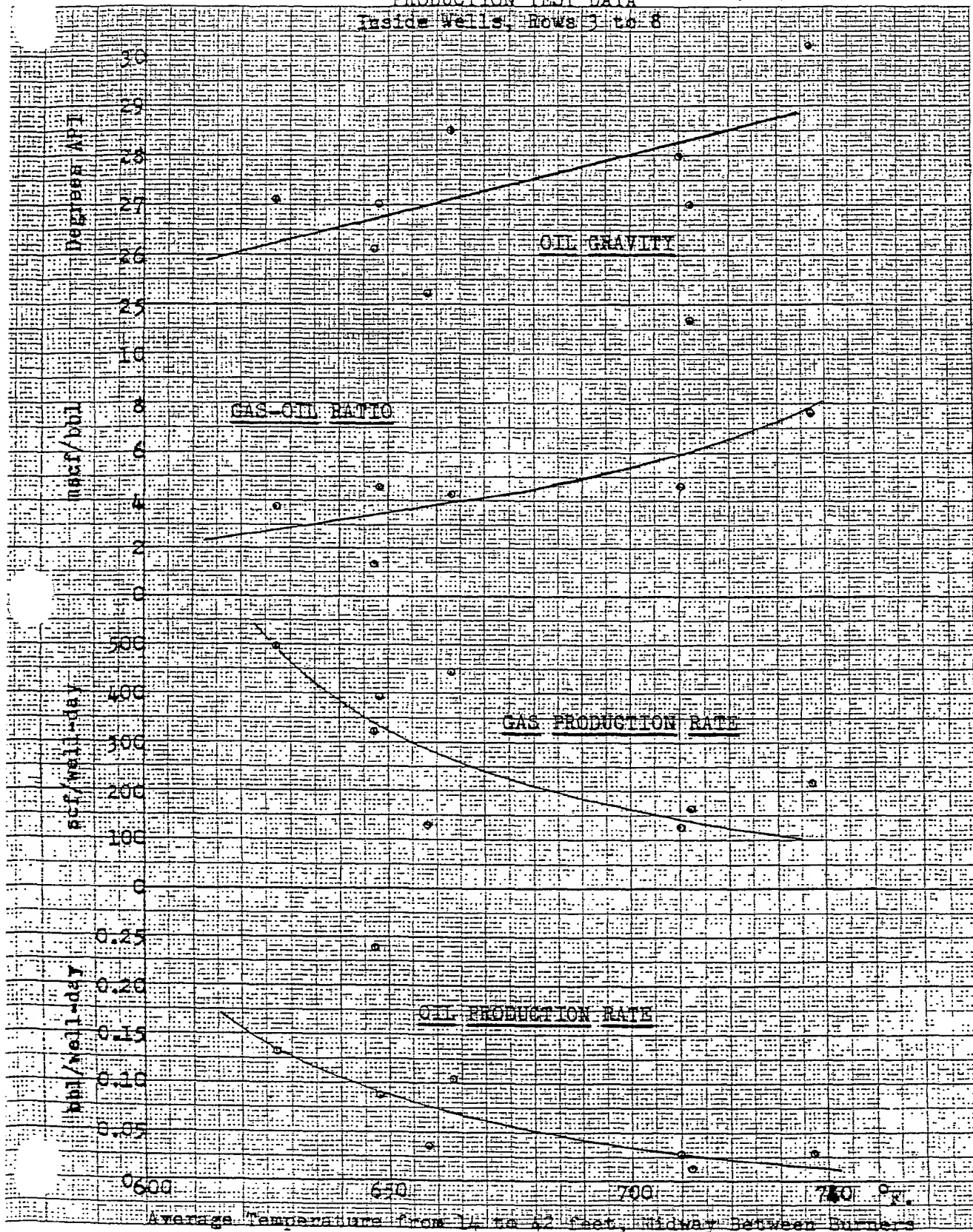
L9-443
5-25-59 RHTEMPERATURES IN BS-3 BURNER CASING DURING
SEPARATE GAS WELL TEST

Figure 152

L9-706
5-14-59 RH

PRODUCTION TEST DATA

Inside Wells, Rows 3 to 8

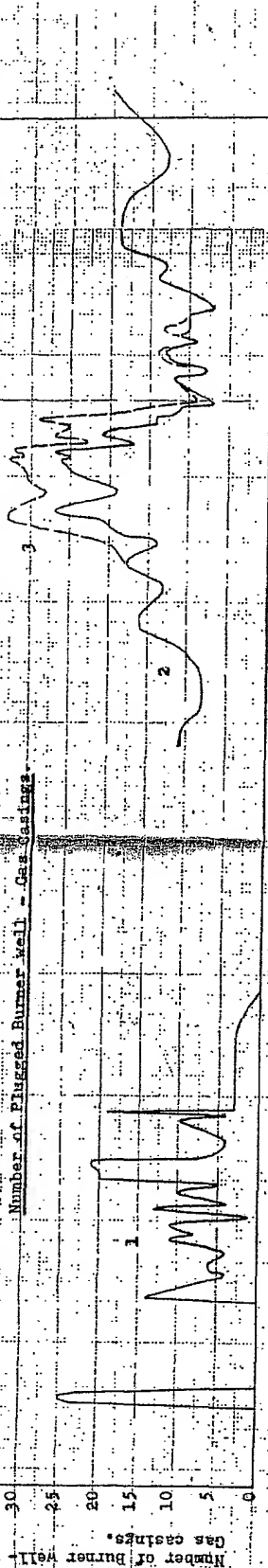


Average Temperature from 14 to 42 feet, midway between burners

Figure 153

Figure 153

Number of Plugged Burner Well - Gas Casings



Curve 1: In Product-lines plugged by tar.

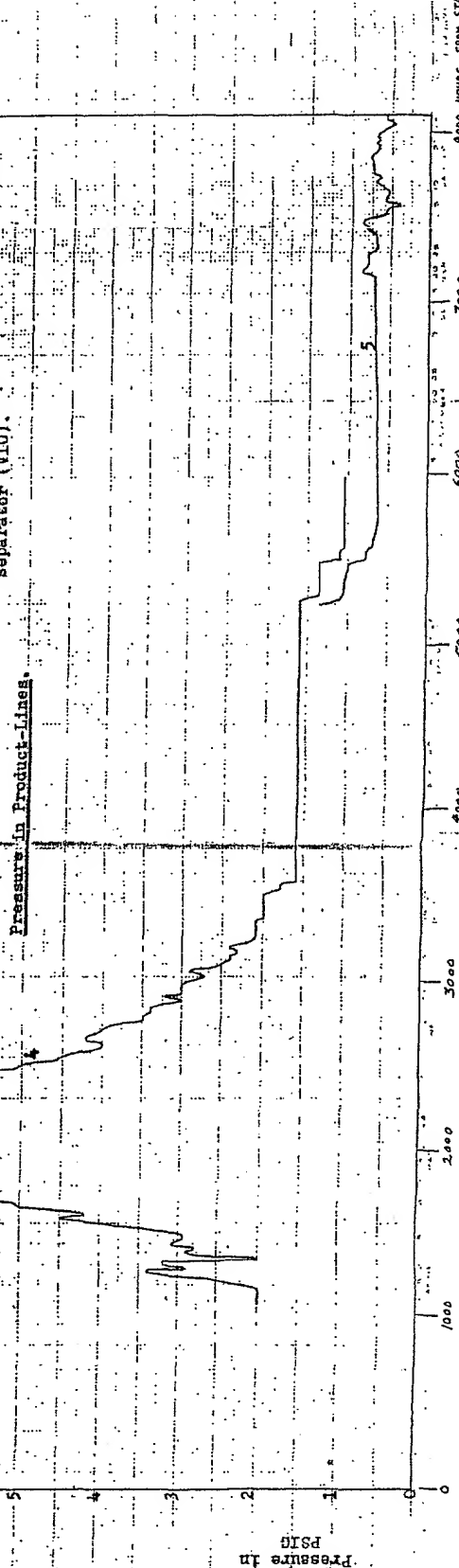
2: Burner well-gas casings plugged by coke.

34. Total Burner well Gas Casings off.

4: Pressure at junction of main product line and branch-product line p2.

5. Pressure at primary separator (V10).

Pressure in Product-Line.



HOLE PATTERN OF TEST L9.

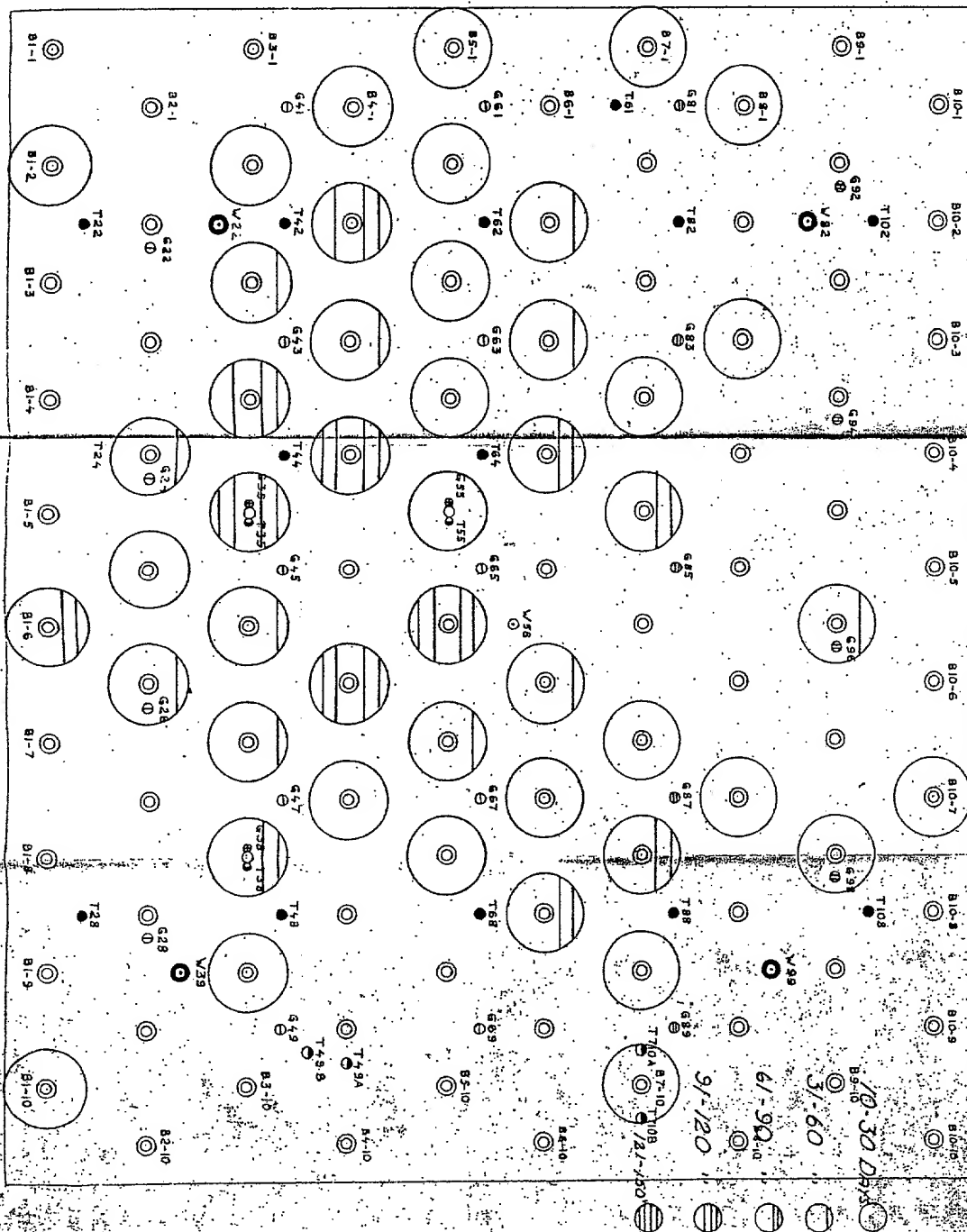
L9-101...
JAN. 21. 1958. B.P.
REVISED 3.15.58. AP

- BURNER. 15' 5 5/8" AND 40' 4 3/4" HOLE. 52' 2 1/2" CASING.
- ⊙ CONCENTRIC GASWELL AROUND BURNER. 13' 4 5/8" - 4 22" CASING.
- ⊙ SEPARATE GASWELL IN BURNERHOLE. 15' 1 1/2" CASING.
- ⊙ " " 2' FROM ADJACENT BURNER. 20' 3 3/4" HOLE. 15' 1 1/2" CASING.
- ⊙ " " 5' 9" " 50' 3 3/4" HOLE FILLED WITH GRAVEL TO 15' 15' 1 1/2" CASING.
- ⊙ " " 5' 9" " 50' 3 3/4" HOLE FILLED WITH GRAVEL TO 15' 15' 1 1/2" CASING.
- ⊙ CONCENTRIC GASWELL AROUND WATER WELL. 15' 4 5/8" - 4 22" CASING.
- ⊙ WATER WELL 5' 9" FROM ADJ. BURNER. 55' 5 5/8" HOLE. 50' 1 1/2" TUBING. W56: 75' 5 5/8" HOLE. 40' 3 1/2" AND 10' 4" TUBING.
- ⊙ TEMPERATURE WELL 5' 9" FROM ADJACENT BURNER. 55' 3 3/4" HOLE. 52' 2" CASING.
- ⊙ " " IN BURNERHOLE. 52' 1" CASING.
- ⊙ " " 3' (T49B 4') FROM ADJACENT BURNER. 55' 3 3/4" HOLE. 52' 2" CASING.

Figure 154

PLUGGED GAS CASINGS

L9-352
4/6/58 B.P.



L9-101
JAN. 21. 1958. BP
REVISED 3.15.58. AP

- BURNER. 15' 5⁵/₈" AND 40' 4³/₄" HOLE. 52' 2¹/₂" CASING.
 ◎ CONCENTRIC GASWELL AROUND BURNER. 13' 4³⁰/₆₄"-4²²/₆₄" CASING.
 ● SEPARATE GASWELL IN BURNERHOLE. 15' 1¹/₂" CASING.
 ○ " " 2' FROM ADJACENT BURNER. 20' 3³/₄" HOLE. 15' 1¹/₂" CASING.
 ○ " " 5'9" " " " " " "
 ○ " " 2' " " " " " " " " 50' 3³/₄" HOLE FILLED WITH GRAVEL TO 15' 15' 1¹/₂" CASING.
 ○ " " 5'9" " " " " " " " "
 ◎ CONCENTRIC GASWELL AROUND WATER WELL. 15' 4³⁰/₆₄"-4²²/₆₄" CASING.
 ○ WATER WELL, 5'9" FROM ADJ. BURNER. 55' 5⁵/₈" HOLE. 50' 1¹/₂" TUBING W56: 75' 5⁵/₈" HOLE. 40' 3¹/₂" AND 10' 4" TUBING.
 ● TEMPERATURE WELL. 5'9" FROM ADJACENT BURNER. 55' 3³/₄" HOLE. 52' 2" CASING:
 ○ " " IN BURNERHOLE. 52' 1" CASING.
 ○ " " 3'(T49B 4')FROM ADJACENT BURNER. 55' 3³/₄" HOLE. 52' 2" CASING.

